Toward General Education

SENIOR BASIC TRAINING COLLEGE
BANIPUR

~~1110~~

~~1110~~

~~4615~~

E/84

SENIOR BASIC TRAINING COLLEGE
BANIP

Toward General Education

Toward

Earl J. McGrath

DEAN, COLLEGE OF LIBERAL ARTS
STATE UNIVERSITY OF IOWA

Paul J. Blommers

ACTING DEAN, COLLEGE OF EDUCATION
STATE UNIVERSITY OF IOWA

John C. Gerber

ASSOCIATE PROFESSOR OF ENGLISH AND SPEECH
CHAIRMAN, COMMUNICATION SKILLS COURSE
STATE UNIVERSITY OF IOWA

Walter R. Goetsch

ASSOCIATE PROFESSOR OF EDUCATION
LIBERAL ARTS ADVISORY OFFICE
STATE UNIVERSITY OF IOWA

James A. Jacobs

PROFESSOR OF PHYSICS AND
NUCLEAR PHYSICIST
STATE UNIVERSITY OF IOWA

The Macmillan Company

General Education

Lester D. Longman

PROFESSOR AND HEAD, DEPARTMENT OF ART
STATE UNIVERSITY OF IOWA

Paul R. Olson

PROFESSOR OF ECONOMICS
STATE UNIVERSITY OF IOWA

Goldwin Smith

ASSOCIATE PROFESSOR OF HISTORY
WAYNE UNIVERSITY, DETROIT, MICHIGAN

James B. Stroud

PROFESSOR OF EDUCATION AND PSYCHOLOGY
STATE UNIVERSITY OF IOWA

L. A. Van Dyke

ASSOCIATE PROFESSOR OF EDUCATION
DIRECTOR, UNIVERSITY HIGH SCHOOL
STATE UNIVERSITY OF IOWA

New York *1948*

Copyright, 1948, by The Macmillan Company

All rights reserved — no part of this book may be reproduced in any form without permission in writing from the publisher, except by a reviewer who wishes to quote brief passages in connection with a review written for inclusion in magazine or newspaper.

Printed in the United States of America

7.10.93
7463

Foreword

THE BIOGRAPHY OF THIS VOLUME BEGAN WITH a social evening at the home of one of the authors. On that occasion casual discussion of the disturbed world situation and the ineffectiveness of education in preparing young people to meet contemporary problems led quickly to a more fundamental and systematic consideration of needed educational reforms.

A series of discussions ensued, extending over more than a year. Throughout these discussions the student as future citizen was the point of departure in all our thinking. The plan of general education here presented is, we believe, based upon a realistic appraisal of the types of students the colleges will have to instruct. We have spent little time moaning about the inefficiency of high school teaching, the limited cultural background of students, or the demand for college education by young people of low intellectual ability. Rather, in our thinking about the curriculum and the other educative influences of college life, we have accepted the infinitely varied student body which American social philosophy, for better or for worse, has sent into the colleges. We have attempted, and in a measure succeeded, we believe, in producing a program of general education adaptable to the needs of all these college students. We believe that any enterprising and imaginative faculty can work out a suitable curriculum of general studies within this framework. The title of this volume, however, reveals our conviction that much experimentation, systematic appraisal of the results, and readjustment in the light of tested experience must occur before the purposes of general education can be achieved in American democracy.

Though the authors were all members of a single faculty, this book is not a report of that faculty. It is the expression of the combined thinking of ten men who represent no one but themselves, though it may be added that faculty members here and elsewhere would be sympathetic to many features of this plan. Whatever disadvantage may result from the lack of sanction by an official body is much more than offset, we believe, by the detachment of judgment, the freedom from the pressures of vested interests, and the single-minded preoccupation with the welfare of the student that have been possible in this informal group. We have kept the *student* – not subject matter, not departmental enrollments, not local personalities, not the narrow interests of the specialist – in the foreground of our thinking.

Perhaps it was this freedom from extraneous considerations which distort thinking about educational problems that has resulted in complete unanimity in our recommendations. In our deliberations there were only minor disagreements at any point. These have happily been resolved with the consequence that the plan of general education here proposed carries our full and unanimous endorsement. The historian agrees with the scientist, the scientist follows the economist, the economist supports the humanist, and the humanist endorses the view of the educationist. Among the members of this group a wide variety, though not all, of the various disciplines is represented. Since we have not dealt with the esoteric subject matter in the advanced branches of the various fields of learning, but rather with the elementary knowledge, skills, and attitudes which all our people must possess if they are to discharge the responsibilities of intelligent and informed citizenship, we make no apology for this incomplete representation. The barriers to discussion of our common problems implied in the criticism that we do not represent all fields of learning are just the evils in our present educational philosophy and practice which this plan of education is calculated to remove. Only as our people achieve a common understanding of contemporary problems and a common intellectual experience to deal with them can we hope to realize the full benefits of democratic life in a world at peace. This plan of general education is modestly designed better to prepare our citizens for this type of life.

Earl J. McGrath
Paul J. Blommers
John C. Gerber
Walter R. Goetsch
James A. Jacobs
Lester D. Longman
Paul R. Olson
Goldwin Smith
James B. Stroud
L. A. Van Dyke

Table of Contents

1. General Education and Society 1
2. General Education and the Individual 22
3. Language and Communication 53
4. The Natural Sciences 89
5. The Social Sciences 107
6. The Humanities 131
7. Appraising the Results 209

Toward General Education

NIOR BASIC TRAINING COLLEGE BANIPU

1. General Education and Society

NOT LONG AGO AS HISTORY IS RECKONED THE COMMON man of Europe was subject to fine for attempting to educate his children. Education for one class and the lack of it for another was a means of keeping aristocrats and common folk apart. Following the Reformation, literacy – specifically the ability to read the Bible – became for many Protestant groups a condition of salvation. Some religious leaders, however, saw beyond this narrow function of education to the political ends of schooling as the following sentence from Martin Luther's celebrated letter to the mayors and councilmen of German cities illustrates:

> Even if there were no soul, . . . and men did not need schools and the languages for the sake of Christianity and the Scriptures, still, for the establishment of the best schools everywhere, both for boys and girls, this consideration is itself sufficient, namely, that society, for the maintenance of civil order and the proper regulation of the household, needs accomplished and well-trained men and women.

But even after the Reformation European schools continued to maintain class distinction. The dual system in operation there – one system for the favored class and another system for the common folk — has served to educate each class for its peculiar position within the social order.

The educational pattern which the colonists brought to America also followed the dual plan in general outline. It was aristocratic. But in spite of the fact that the democratic features and functions of educational institutions with which we are familiar today were not clearly foreseen by the founding fathers, many of the statesmen and political thinkers who played a part in the origin and growth of our democratic institutions realized that general dissemination of knowledge among the people was necessary to the well-being of democracy.

Education and Social Mobility

As western frontiers were extended, brawn, personal courage, and native ability counted for more than the fortunes of birth. The common school designed to serve the educational needs of all classes came into existence, followed some years later, chiefly after the Civil War, by the public high school. With the advent of this institution America could present, in theory at least, a continuous program of free education open alike to all, through the high schools, though many practical obstacles actually prevented the realization of this social ideal.

The high school then clearly represents a response to the desire of the American people for more education for the common man than that provided by the elementary school. The high school represents the view that an enlightened people can regulate their political and social destinies more wisely than an unenlightened people. This institution is the concrete embodiment of the democratic principle that educated people live more richly, realize their own potentialities more fully, and make a greater contribution to the general social good than do those of limited education. Furthermore, whatever the original intentions of those who established our public elementary and secondary schools, they have now become the means of helping to lower social and economic barriers. For it is the function of the schools not merely to provide a steadying influence in society but to raise the social, intellectual, and economic life of millions of citizens as well, indeed to elevate whole segments of the body politic by making education universally accessible and free.

What has been said about the purposes of secondary education holds for college education as well. Both are concerned with the development of rational and responsible citizens in a free society. On a higher level, the more exclusive private colleges and universities have perhaps a somewhat less difficult task to perform, for many of their students, drawn from the privileged classes, have had a superior secondary education and other cultural advantages denied less favored youth. Alone, however, these institutions, serving as they do only a limited, selected group, do not meet the needs of higher education in a democratic state. It remains then for the less exclusive private schools and for the state and other publicly supported colleges and universities to admit and accommodate the heterogeneous procession leaving the high schools each year from a widely varied range of social origin and economic position.

Differences among High School Students

It is with these thousands of boys and girls as they come up through high school that we are here concerned. While seeking to understand the complexity of courses, interests, teachers, parents, nationalities, methods, "IQ's," attitudes, and wishes in the high school population, the college should work with the secondary school toward determining, as far as possible, what might serve as a community of background – intellectual, social, personal – to be developed during both the high school and the college years. But uniformity in high school preparation and social background cannot be achieved for decades; hence the college must accept the situation as it is for the time being. To attempt to build a college program of general studies without recognizing the varied characteristics of high school graduates as they come from the secondary school today would be to attempt to build a skyscraper with no knowledge of the kinds or quantities of material that must be used in the construction. Hence we look briefly at the work of the high schools and the nature of their products.

Secondary education in America is a strange mixture of sameness and diversity. It is expected to adapt its program to a large, often oddly assorted group of young folk, many of whom will not or cannot remain in school through graduation. One finds much the same methods, the same types of textbooks, and the same extracurricular organizations in public and private, large and small, rural and urban high schools over the country. Yet the differences between two high schools in the same community may be as extreme as the differences between a great play and its Hollywood version – or between two pronouncements on general education. One school may direct more than half of its students into specialized technical courses while another school in a comparable community may enroll most of its students in conventional college preparatory subjects.

For that matter, one may find similar extremes in classrooms within a single school. One teacher may be doing a superior job with *Hamlet* in senior literature, and in the next room another teacher may be methodically dissecting the same play. A single class of freshmen in American history or English or science may range in intellectual capacity all the way from that of an average fourth-grade student to that of a college freshman. A high school civics teacher may have in the same class of thirty or forty students, Baptists, Catholics, Hebrews, Christian Scientists, and Seventh-Day Adventists, among whom may be sons and daughters of labor organizers and corporation managers, farmers and drugstore clerks, paper hangers and physicians. Faced with these extremes in abilities, interests, and background it is understandable that the high school teacher frequently aims at average performance in routine learning and gives scant attention to controversial social issues. As a consequence of the widening ranges in intellectual power, educational interests, and occupational plans of its student population, caused by the attendance of a more fully representative social group, the high school has had to accept new functions and shift direction in its instructional emphasis. At least it has had to go so far as seriously to contemplate such change.

But changes in the schools come slowly and painfully. A considerable amount of pruning has been done and more needs to be done. The average and small high schools with the usual limits of staff cannot offer a full program of mathematics, Latin, science, ancient history, and other preparatory subjects and at the same time meet public demands for agriculture, home economics, typewriting, auto mechanics, modern social problems, and similar so-called practical courses. Secondary schools have straddled fences and made compromises as most colleges have done. Some schools which have made no effort to meet the demands of the times still require all students to take conventional college preparatory subjects. On the other hand, many schools have swung to the opposite extreme and have overloaded their curricula with vocational subjects. The larger high schools, because of more adequate facilities, have been following both trends, offering both preparatory and terminal curricula. Many smaller schools have retained some college preparatory subjects, forcing all students to take these courses whether or not they plan to go to college, while they have added a few other terminal courses leading to employment upon graduation.

In spite of these difficulties of adjustment to a wide variety of geographical setting, community needs, and social differences, the high school curriculum has moved steadily toward a general program with emphasis on social understanding and responsibility. The major gains in course offerings and enrollments have been in social studies, general courses in science and mathematics, and certain widely used practical subjects such as home economics, general shop, and typewriting. English has remained a constant subject for all students, while foreign languages, ancient history, and advanced mathematics and sciences have been studied by a smaller and smaller percentage of students for the past thirty years.

Though a number of vocational and specialized courses have been added, the broad aims of the secondary school program are not greatly different from those now taking form for general education at the college level. There has been a considerable reaction against further expansion of highly specialized technical training in the high school. Many high school staffs now appear convinced that it is not possible to provide extensive job training and at the same time provide a reasonably effective program for developing basic skills and the social and scientific understandings necessary for intelligent citizenship. Some high schools undoubtedly will and should continue to provide both general and specialized curricula, if they are to serve their communities effectively in farming and industrial areas where exploratory training is needed in agriculture and industrial subjects. There is growing support, however, for the point of view that specialized education of all types – college preparatory as well as vocational – should be moved up into the later years of the secondary school. To this end a few communities have added two years to their secondary schools, concentrating their specialized offerings in these grades. Although this plan has rapidly been gaining theoretical support, actual changes in practice have developed rather slowly.

It would seem to follow from this analysis that any well-planned program of general education in higher institutions should take cognizance of the characteristics of those who graduate from the secondary schools. And college faculties may reasonably be expected to gear their instruction to the type of educational background possessed by these graduates. The average secondary school cannot be expected to provide both general and preparatory programs, if the preparatory prescriptions of colleges continue to be detailed and varied. The most reasonable and intelligent attitude on the part of college and high school faculties would seem to be one of getting together in planning a continuous and integrated pattern of general education at both levels, one which would provide a suitable type of general education both for the eighty per cent who discontinue their formal schooling with the high school and for those who continue on into the colleges and other institutions in which post-high school education is given.

Representing the college group in this cooperative planning we asked ourselves the question: "What education is it these young people must have to prepare them for the responsibilities of citizenship in a free society and in a free world?" In answer to this question we have designed a program of general education for colleges, together with a description of the ends of such a program and the means by which we believe these ends may be achieved.

General Education Defined

General education, as we conceive it, is that which prepares the young for the common life of their time and their kind. It includes the fund of knowledge and beliefs and the habits of language and thought which characterize and give stability to a particular social group. It is the unifying element of a culture. It prepares the student for a full and satisfying life as a member of a family, as a worker, as a citizen – an integrated and purposeful human being. It does not overlook differences in talent, interest, and purpose; nor does it attempt to form everyone in a single mental and spiritual mold. Seeking to make possible the maximum development of the individual consistent with the general good, it encourages respect for inventive genius and tolerance for variations in opinion, while at the same time it rests on the principle that deviations in thought or in act must be based upon understanding rather than ignorance of the purposes, standards, and values of society.

To this end general education affords youth opportunity to know the origins and meaning of the customs and political traditions which govern the life of their time. By cultivating habits of effective writing and speaking, it fosters respect for the mother tongue. By developing the faculty of critical thinking, it strengthens the capacity for intellectual workmanship. By introducing students to the moral problems which have perplexed men through the ages and acquainting them with the solutions men have devised, it offers the hope that this generation may meet its own problems with a sense of the just and the proper. General education seeks to instill attitudes and understandings which form the essence of good citizenship. Moreover, with its interest in a sound mind in a sound body, necessary for responsible living, it supplies the factual basis of mental and physical health and encourages the proper practices of eating, sleeping, thinking, and playing. Through the sharpening of aesthetic awareness it enables students to find beauty in its multiform expressions and to create it in their own lives.

Not concerned with the esoteric and highly specialized knowledge of the scholar, general education includes neither the factual minutiae of investigations at the frontiers of knowledge nor the cultivation of the specialist's abilities and habits of mind. Without decrying professional education, research, or advanced specialized study, protagonists of general education maintain rather that these activities, laudable in themselves, should not prevent high schools and colleges from discharging their first responsibility – teaching young people how to live. They agree, to be sure, that the increase of specialized knowledge, at least in some fields, must continue even at an accelerated pace, but that the time between the discovery of new truth and its dissemination to the mass of the people is too long to be of the greatest social value. For example, scientific knowledge in the field of sanitation essential to public health, demonstrated decades ago, has not yet become a part of the thinking of the average citizen. Thoughtful men are agreed that in the present crisis the rapid spread of knowledge is vitally necessary for survival. Advocates of general education urge the same diligence in diffusing knowledge that has brought about its rapid increase.

Because this definition of general education employs many of the terms and phrases traditionally used in defining liberal education, someone may ask, why use the term *general education* at all? There is an important reason for doing so! Education, which in its earliest conception was genuinely liberal, has now changed. To a very large extent the curriculum in colleges of liberal arts has become as specialized as that of the medical school or the law school. Indeed, many courses in law, Evidence, for example, have more of the characteristics of liberal studies than do many advanced courses in the liberal arts college. The original purposes of liberal education in preparing men and women for a free life which they would share with all their countrymen in a free society has been overshadowed by specialized vocational training. Liberal arts colleges have been so preoccupied with the training of psychologists, chemists, and musicians, that they have neglected the education of the free man. They have not realized, as Montaigne did, that "the object of education is to make not a scholar, but a man." It is with the latter that general education is concerned. For this reason the substitution of the word *general* for *liberal* is justified if it focuses the attention of educators on the urgent need for a restoration of those humane values which have been gradually lost sight of in the planning of the past half century, when specialization has been the order of the day.

Resting upon certain assumptions as to the type of individual and the type of society that the educative process should create, general education has both an individual and a social reference. As Milton puts it: "I call, therefore, a complete and generous education that which fits a man to perform justly, skillfully, and magnanimously all the offices, both private and public, of peace and war." Yet many plans for reform seem to deal almost exclusively with the traits of individuals;

the social significance is at most merely implied. We believe, however, that in this period of social instability with competing ways of life constantly before us, it is necessary to be explicit about the type of society a particular education is calculated to produce.

General Education and Society

Now where do all of these definitive statements lead, this description of the scope and the limits of general education? For what higher purpose do they form the framework? We believe the final goal of general education to be the creation of the good life. We believe in training for the kind of life in which men persistently try to increase their understanding of the world in which they live, to govern their lives in accordance with high ethical standards, and to arrange their lives and their surroundings with some regard to aesthetic values. Unless men are educated to be reasonable, to be moral, and to be aware of beauty, it is a question whether the activities of educational institutions can be justified, regardless of their other achievements. Unless they can reason together in good will with emotional maturity and balanced judgment, there seems to be little hope of maintaining this civilization. These ideals, then, represent the good life, the life dedicated to the *pursuit* of the true, the good, and the beautiful.

Divorcing them from cheap sentimentalism and pious half-truths, our conception of truth, goodness, and beauty is pragmatic. Man is endowed with certain faculties of perception and reasoning and with certain powers of adjustment. He is moved by basic desires which he tries to satisfy through the exercise of these faculties. By observing what types of behavior promote his own good and the well-being of other human beings, he can keep adjusting his behavior in such a way as to increase these satisfactions. Thus through trial and error man gradually grows in wisdom and increases his opportunity for individual self-realization without harm to the general good.

The test, then, of what is good and true and beautiful is to be found in the results of a course of action based on the principle of the greatest good for the greatest number. Whatever conception of truth or goodness or beauty leads to the realization of individual potentiality and the enrichment of satisfactions, private and public, should be passed on to the younger generation through the educational system; on the other hand, whatever does not free the energies of men but restricts their development and reduces their satisfactions should be abandoned or modified. We believe that all college students can be taught to understand this simple pragmatic conception of the ends that should animate all educational efforts and, in turn, all the activities of men.

Now general education, as we have outlined it, recognizes that its highest of goals, the creating of the good life, can never be more than a search, a search for ideals always unattainable by finite and fallible human beings. We believe, however, that college students, once they see what it means, can find pleasure in that pursuit as a way of understanding what otherwise must seem transient. For what is true cannot be defined for all ages to the end of time. The infinite complexity of the universe and the fallability of human perception and judgment are evidence that truth will evolve as man penetrates further the dark mysteries of life. This concept of emergent truth we believe to be basic to the constant enrichment of the lives of men in a democratically governed society. Like truth, goodness will be differently conceived by succeeding ages. As knowledge expands through a better understanding of the relations between men and men and between nations and nations, and as we grow in philosophic wisdom, our conception of the *good* will also change. New aesthetic conceptions will likewise evolve from the changing conditions of life and the practice of the various arts.

An essential feature of democracy is the ability and willingness of persons of different faiths and different purposes to resolve their differences in the larger good of the community, or at least to refrain from an arbitrary imposition of their own credo on their neighbors. Hence it should be possible, as indeed it is today, for institutions based on completely different philosophies to live together harmoniously. It cannot be overlooked, of course, that some satisfactions will be denied by this parity of creeds, especially among those who believe that they already possess the final and immutable truth. But this frustration will be no greater than that which results from other forms of compliance with the general will in any democratic group when personal convictions run counter to the common view. We believe it of the utmost importance that free discussion of all points of view with regard to these matters be not only permitted and guaranteed but encouraged. Only thus can members of a democracy achieve more general agreement concerning the meaning of truth, goodness, and beauty.

It is not enough that men should understand the conceptual meaning of truth, of goodness, and of beauty. Their daily lives must exhibit this knowledge in action. Much educational effort is abortive because it does not make clear to students the relationship between thought and action, between ideas and life. One contemporary school of thought, to which we take exception, holds that to teach students to make discriminating judgments will, in turn, lead them automatically to moral deeds. Such reasoning Gibbon recognized as fallacious long ago when he observed that as Constantine "gradually advanced in the knowledge of truth, he proportionately declined in the practice of virtue." We likewise reject the point of view that the formal study of aesthetics will *inevitably* awaken sensitivity to beauty in everyday life or a desire to create it. Knowledge and wisdom are not invariable concomitants; neither are knowledge and virtue, or knowledge and the appreciation of beauty.

Our civilization is, however, distinctly lopsided. It has become preoccupied with one of the three basic elements in the good life — the pursuit of truth, the pursuit of knowledge for its own sake. Men in laboratories and libraries alike have been busy with the manufacture of pieces of information. High school and college curricula are bloated from the rapid ingestion of new subject matter. Students are surfeited with facts about themselves and their world. Some of this knowledge is vital and useful; much of it is dead or far removed from daily activities. But even if it were all immediately useful, it could still be said that our schools have been occupied too much in making and spreading knowledge and too little with the cultivation of moral standards and aesthetic taste. Many educators, especially those in institutions with no religious tie, have prided themselves on their objectivity and on their freedom from any commitment to moral values. As a consequence of this widespread practice of lowering of the sights, the larger purposes of life have too often been lost, even in fields like literature where human values are of the essence. And the fine arts whose principal responsibility is the cultivation of aesthetic taste have been almost completely neglected except as intellectual disciplines, in which respect they have no advantage over other subjects.

But if general education is to create the good society, the society that is sound and wise, it must first create the good citizen. To do so, it must take into consideration the mental, physical, and spiritual qualities of students as individual human beings. No set of objectives which fails to recognize those wide variations among students described earlier will be very useful in working out a program of general education for all American youth. Every autumn they stand before the gates of our colleges, representing an infinite variety of background. Some have come from homes with a rich cultural life; some come from the other side of the railroad tracks. Some were the valedictorians in their high school graduating classes; other have a much lower order of intellectual ability. In some, intellectual interests are highly developed; in others the spark of intellectual enthusiasm yet remains to be kindled. Some have a well-recognized vocational goal; others have not chosen a calling. Some possess robust physical health and inexhaustible energy; others are weak in body and weak in spirit. The freshman class which enters more than a thousand institutions of higher education throughout the nation every fall exhibits these qualities in infinite permutation.

To meet these variations an educational program must be realistic. It must recognize these differences among students, as unfortunately many of the recently announced college plans fail to do. As we have said, it is possible for a single institution to develop its own conception of general education without regard to student differences on the assumption that a selective admission will make the student body homogeneous. An institution may, for example, accept students only from the upper ten or fifteen per cent of high school graduating classes and gear its program to the needs of this select group. Or it may restrict admission on the basis of social status, race, or economic self-sufficiency. The merits of a plan of general education which rests on such selective devices are debatable under any circumstance, but obviously such a plan would fall far short in institutions which must and should care for the needs of the other hundreds of thousands of students who want education beyond the high school.

General Education and the Whole College Curriculum

We believe the program of general education here described to be suitable for the latter purpose. In offering this common intellectual experience to those who seek education beyond the high school, we do not intend that it shall be the whole of college education. A candidate for the bachelor's degree will necessarily include in his course of studies, not one, but three elements. The first element, the core of common knowledge, skills, and attitudes, represented by the program of general education, will introduce the student to the various disciplines, acquaint him with their facts and methods, and supply him with the intellectual, moral, and aesthetic basis of communication in common with his contemporaries. This wide range of studies is calculated to reduce the high degree of intellectual specialization, which now obstructs clear understanding and cooperative action on common problems.

In considering this program as a part of a total college curriculum we have deliberately refrained from describing the courses in this common unit in terms of credits or hours of instruction. These matters may better be left to the ingenuity of faculties who must adapt such a program to the needs of students, the qualities of the faculty, the purposes of the institution, and a multitude of other local circumstances. Moreover, we believe that by playing down the mechanics of the educative process attention is shifted where it properly belongs – to the student, the human material with which institutions work. Yet, as we conceive the practical implementation of this program in institutions whose programs we know at first hand, the proposed courses would cover approximately half the total number of hours usually included in the bachelor's degree, that is from sixty to sixty-four. Surely not an excessive demand. Presumably this instruction shared by all students will be the cohesive element in national life. To those who object that the program too greatly reduces the time available for specialized study, we would reply that the specialization which they demand is one of the disintegrating social forces of our time. If this unit of general instruction makes it impossible to complete specialized study in the four-year period, which we doubt, we say, extend the period. Thus we place general studies at least on a par with vocational and specialized education, where it rightly belongs. In the professional schools which already require for admission a complete liberal education, or a major portion thereof, this program will cause no inconvenience. Indeed many educators in the professions of medicine, dentistry, law, and teaching are already arguing for a better general education as a basis for professional study. Members of other professional groups face the necessity either of making similar adjustments, or of being classified at a lower level in the hierarchy of liberally educated men and women.

The second element in the liberal arts program will consist of advanced instruction in one or more of the disciplines. There must be provided ample opportunity for the cultivation of special abilities and for the development of personal interests. Hence for those who intend to devote their lives to study in certain fields or in related professions the college must offer systematic, specialized instruction. In fact, there must be a sufficiently wide offering to make up a variety of majors. The intellectual effort involved in the advanced work of the various departments affords an experience which no student who is granted the bachelor's degree should be permitted to avoid. The sharpening of his mind, the development of habits of intellectual workmanship, and the massing of a large body of knowledge in a single field give him a feeling of confidence which it is difficult for him to acquire in any other way.

Nor will the student find his time completely taken up by the requirements of general education and by those in his major department. Hence a third element in the total college program will generally be present, composed of courses chosen freely by the student in terms of his own interests. These courses might be selected from the major or a related field, from other systematic courses outside the major field, but of a specialized variety, or from other general studies not included in the common core. In making his choice, we hold that he should be encouraged to elect the broader variety of course for the nonspecialist rather than additional courses in his own field. This will require that colleges organize general courses in addition to those which constitute the irreducible core described in detail in later chapters. Since the content prescribed by no means exhausts the subject matter in any of the included areas, it will not be difficult to organize additional units of instruction without duplication.

The weaving of these three strands into a college program will result in widely varying design in spite of the similarity of the threads that must be used. The patterns of general, special, and elective studies in terms of the four years of college and in terms of the interests and abilities of students must inevitably be determined by individual institutions. We believe, however, that two principles should govern such arrangements. The interest which the student has in a particular subject or field should be capitalized from the very beginning of his college work, and the general and special studies should not, therefore, be separated by being offered only in certain years either early or late. The latter arrangement in our opinion leads to an artificial splitting up of knowledge and increases a natural inclination on the student's part to favor spe-

SENIOR BASIC TRAINING COLLEGE
ANIPUR

cial or vocational studies at the expense of his general, cultural development. Hence we think that the student should begin his study of general and specialized subjects at the outset of his college career and continue to study both until graduation or until he leaves the institution. The exact proportion of either to be pursued in a particular year should be determined by a number of factors which cannot be predicted. We believe it to be a sound principle of curriculum building, however, that the proportion of general studies should be considerably larger in the early years and the proportion of specialized study should increase as the student progresses toward graduation. Under this plan the high degree of motivation which the student customarily brings to specialized study would be used to advantage from the very beginning. Each student would, therefore, be able to pursue his own special interest throughout his college years but like all his contemporaries he would be required to complete a program of general studies before graduation. A program made up of the proper proportion of these three elements in the college curriculum will, we believe, prepare students for the responsibilities of citizenship in an increasingly complex world while at the same time preparing him to take his full part in doing the work of the world.

~~1110~~

E
54

7.10.93
1463

2. General Education and the Individual

THE DISCUSSION THUS FAR HAS SKETCHED THE OUTlines of the society which this plan of general education is intended to create. But societies are made up of individual human beings possessing certain intellectual, moral, and physical traits. It is these traits of mind, body, and personality that we believe the program of general studies should produce. These qualities we call the objectives of general education. Insofar as possible they are described in terms of human behavior rather than in terms of this or that body of subject matter, because we believe that the test of the value of all learning is its usefulness in living. Hence, instead of aiming to teach the student the fundamentals of grammar and rhetoric we would teach him how to use his own language effectively in speaking and writing. That this difference is real is amply illustrated by students who can drone generalizations, rules, or laws in the various subjects without the slightest capacity to use them in their thinking about the real problems of everyday life.

We conceive the objectives of general education to be six, namely: (1) to cultivate habits of effective communciation by word and by number, (2) to cultivate habits of reflection and the processes of reasoning employed in reaching valid judgments, (3) to assist the student in developing a code of ethics and a consistent philosophy of life, (4) to increase the student's awareness of beauty and his desire to create it, (5) to cultivate habits essential to physical and mental health, (6) to prepare the student for the responsibilities of citizenship.

Communication

Men cannot learn about the good life until with real independence they can use the elementary skills of communication in their everyday dealings with each other. They must be able to talk and read and write and think, and they must be able to employ number symbols, as well as words. The cultivation of habits of effective communication by word and by number must be, then, the *first* objective of general education.

The capacity to use the mother tongue with clarity, simplicity, and precision should distinguish those who have had the advantage of college education, as, alas, it does not today. Our inability to convey precise meanings to our fellows and to understand the meanings they attempt to convey to us is at the basis of many of our present social and political problems. Listening and reading and speaking and writing understandably—all are important in reaching agreement on what we mean. As psychological research has abundantly demonstrated, many students have difficulty in grasping the ideas of others and even in formulating their own, because they know not the power of the written and the spoken word. When such students learn efficient habits of reading and listening, their ability to comprehend subject matter improves; and as they achieve discrimination in speaking and writing, their ability to formulate ideas and to see them in their larger relationships is increased. Only so will their thinking grow clearer; only so can their stature in knowledge and wisdom increase.

But with scholars agreeing that words and numbers alike — whether in the highly abstract generalizations of Einstein or the crude reflections of Mortimer Snerd — constitute the basis of thinking, it is important that instruction in both be offered. In fact, much of the knowledge and the culture of western civilization is expressed in number symbols rather than in words. Designed as it is to prepare students for living in the world today, general education must therefore include the instruction in mathematics needed in the normal activities of life.

Now many men and women — the engineer, the doctor, the actuary, and the physicist, to mention but a few — must understand and be able to use the processes of higher mathematics with confidence and accuracy. The average person outside of these technical fields, however, can probably get along with no mathematics beyond arithmetic, elementary algebra, and demonstrative geometry. The difficulties which most people encounter in dealing with mathematical problems grow not from their ignorance of higher mathematics but of the elementary concepts of number and from their carelessness in using what they do know. They have neither mastered the basic principles nor learned to apply them accurately. Tests administered by the armed forces in the early days of the war revealed what in many instances amounted to mathematical illiteracy among our military personnel, and in the excitement which ensued there was immediate and almost universal demand for the increased study of higher mathematics. Yet these tests did not cover advanced courses, such as the calculus and function theory; they were intended only to measure the ability to use simple arithmetic, algebra, and geometry. It was in these subjects that American youth betrayed an ignorance which, among members of some branches of the service, would have been serious. The story of the nurse who administered two one-eighth grain tablets because no one-sixteenth were available may be apocryphal, but it illustrates the point. Another example of inadequacy in more recent tests – not an army test this time – shows that of all the freshmen taking an entrance examination in mathematics in a midwestern university, forty-six per cent did not get the correct answer to the following question: What is the interest on a loan of $100 for three months at six per cent? As long as students come to college with such intellectual disabilities it will be necessary for institutions of higher education to repair them.

Because instruction in the fundamental mathematical processes is the responsibility of the elementary and secondary schools, we believe that a course for making up such deficiencies is not worthy of college credit. For the present, however, institutions of higher education must offer such instruction, whether or not for credit, if Americans are not to be grossly incompetent in mathematical matters. To assure that such incompetence is discovered and corrected before the student leaves college, tests of aptitude in mathematics should be administered to all students at the time of admission. Those freshmen who fall below the minimum of acceptable achievement should be required to attend a clinic for remedial instruction until their deficiencies are removed or until they leave the institution. No student should be permitted to graduate from an institution of higher education without a working knowledge of elementary mathematics. Many college students, of course, will need advanced instruction in preparation for their later professions; others, already proficient, will wish to study higher mathematics for the sheer pleasure of intellectual accomplishment, and should be encouraged to do so. Valuable as such courses may be, we believe that they lie outside the limits of education for all, outside the pattern that we have designed for general education.

We take the same position with respect to the study of foreign languages.

Let it be clear that we do not oppose the study of foreign language as such, but merely a requirement that all students study a foreign language as one of the elements in a general education. Such a proposal we consider impracticable.

A year of language study is the maximum which a program of general education could include. Except for gifted students this time is not sufficient to make possible an adequate mastery of either the written or the spoken word. Though the teaching methods developed in the military services seem promising, there is still sufficient difference of opinion concerning the value of these methods to suspend judgment.

There are, to be sure, other values in the study of foreign languages, including the understanding of the culture of other peoples, an acquaintance with classical literature, and the mere satisfaction of mastering the difficulties of language study. All these laudable objectives we believe to be impossible of achievement for the average student in the time available in a general education program, and such limited accomplishment as might be possible would not, we believe, justify the time spent.

The general student who does not study a foreign language should, however, gain some understanding of the function of language in conveying ideas and in thinking, an objective which instruction in elementary English by itself does not customarily achieve. A course in communication should acquaint the student with the origin of language in general and the derivation and characteristics of his own tongue in particular. It should likewise make clear the relation between language and meaning. These considerations have led us to propose that instruction in communication contain elements which deal with general language, as well as with the specific techniques of communication by word and by number. Possessing these skills for talking, reading, listening, and writing, the student should have acquired the basis for growth in knowledge and in wisdom.

Thinking

What is knowledge? What is wisdom? What is their relationship? Without discrediting the former, general education places its stress on the latter. Its *second* objective, therefore, is the cultivation of the habits of reflection and the processes of reasoning employed in reaching valid judgments.

That students recognize little difference between knowledge and wisdom stems from a serious weakness of modern education, a preoccupation with subject matter. This practice, aside from deadening the student's imagination, has confused his mind into accepting knowledge as wisdom, into thinking of the two as one. Great thinkers from Erasmus to Einstein have rebelled against the practice of emphasizing knowledge at the expense of reason. In his essay on the Ciceronians Erasmus ridiculed scholars who stifled the intellectual interests of their students by requiring the slavish imitation of Cicero's style to the almost complete neglect of his thought. In more modern terms, but with no less conviction, Einstein expresses the same criticism:

> Sometimes one sees in the school simply the instrument for transferring a certain maximum quantity of knowledge to the growing generation. But that is not right. Knowledge is dead; the school, however, serves the living.

Notwithstanding such admonitions of wise men, the mere learning of factual material continues to be the chief end of schooling, and the developing of habits of reflection and criticism is left to chance. Many new college plans fail to emphasize the cultivation of the intellectual qualities which characterize men of intellectual vigor. Even when institutions do pay lip service to this aim of education, their classroom activities often lapse into the monotonous presentation of factual material assimilated passively, if at all, with no intellectual exertion by the student or no permanent benefit to him.

Overconcerned with the amount and type of material to be covered, those who prepare courses of study disregard their qualities as an intellectual stimulant. Survey courses, for example, so popular in recent years, have attempted to introduce the student to all the common branches of learning with little discrimination or emphasis. Methods of teaching are also adversely affected by the effort to transmit a large quantity of knowledge. Faced with the necessity of covering a wide range of material, the hurried instructor uses such "efficient" procedures as lecturing, catechizing, or reading. In the need to "cover more ground," he avoids the more leisurely methods of discussion and Socratic dialogue, which cultivate independent thought. And the students, if they do well in the semiannual regurgitations of fact in January and June, believe that they have been educated! The student who, from no background of understanding, merely reproduces or identifies the second law of thermodynamics on an objective test often assumes that he has learned something about the physical world, while at best he may have learned something about words and at worst may have learned nothing at all.

A common reply to these criticisms is that thinking cannot occur in an intellectual vacuum. This is a poor defense. The statement is of little help to teachers who must select a limited amount of material from an infinite supply, and it obscures the important fact that any subject matter may or may not be taught well. The effort to cram a student's mind merely to fill a vacuum is to try to fill a bottomless pail by pouring grain into it; there is nothing to give permanent shape or measure. The storing up of aimless, unrelated facts is a danger that general education must guard against. (General education must teach the student to reflect upon the physical world, his fellow men, and his own relationships with them.) It should create a desire to understand this world through the use of reason. It should cultivate the intellectual skills used in the analysis and solution of problems. It should inculcate the habits of detached and dispassionate appraisal of facts, which characterize the thinking of those who seek truth, and should impel the clear expression of what they find. In human relations it should substitute persuasion for force. Cowper forcibly expressed the relative merits of reflection and of passive absorption when he said: "Knowledge dwells in heads replete with thoughts of other men; wisdom in minds attentive to their own."

Teaching students to think and creating the desire to do so are the most difficult and yet the most important tasks of the instructor. They are not the responsibilities of the teachers of any one discipline. For centuries mathematics, the classical languages, and logic were presumed to be peculiarly efficacious in the cultivation of habits of correct reasoning. The investigations of modern psychology, however, show this assumption to have been ill-founded. Rote memorization of inflections, theorems in geometry, or forms of the syllogism sharpens the wits no more than similar mechanical exercises in other fields. On the whole, such mental routine, if an end in itself, enervates and stultifies the mind.

Regardless of the subject being studied, a student learns to reason only to the extent that this capacity is made a conscious end of instruction, a fact revealed in a study by Fawcett on *The Nature of Proof*.[1] It included two groups of students in demonstrative geometry. One group, according to the traditional method, learned theorems and used them in the solution of geometrical problems. A second group began with a consideration of the principles of reasoning, the nature of proof, and the common fallacies of everyday thinking revealed in newspaper editorials and public addresses, and then proceeded to develop their own theorems from a set of postulates. The relation between proof in mathematics and proof in life situations not involving number was constantly brought to their attention. Tests administered at the end of the course revealed that those who learned by the usual textbook method knew no more geometry than the group which spent a large part of the class time in studying the principles of reasoning. But the more significant finding was that those who had pursued the usual geometry course were markedly inferior to the others, in reasoning with nonmathematical problems. Mere memorizing, according to the study, helps the student not at all in solving practical problems; only if trained in applying the principles implicit in reasoning can he think his way through new situations. This training depends on the manner in which a subject is taught.

All disciplines – history, science, art, letters, philosophy – exercise certain intellectual faculties in common. Yet because of the different modes of thought in these various branches of learning, all students must be introduced to each of them in order to find the common ground. In any effort to show students how to analyze reality and apprehend it in its various guises, general education would urge the need for employing the different methodologies, the laboratory, the classroom, the studio, the library.

---

[1] Harold P. Fawcett, *The Nature of Proof*, The 13th Yearbook, The National Council of Teachers of Mathematics, Bureau of Publications. Teachers College, Columbia University, New York, 1938.

This brings us to one of the most basic conditions of mental development, namely transfer of training. It pervades the whole process of mental development and indeed gives us our most general understanding of the nature of the process. Learning most commonly means the acquisition of something new. But it is also true that were a situation wholly novel, learning – certainly intelligent learning – could not begin. Reaction would be at the infantile level. The new, actually the partially new, is learned in terms of the old. In other words, one transfers to a learning situation elements of past learning.

This leads us to a further generalization: transfer of training not only becomes an essential condition to the acquiring of an education, but also an essential condition to the functioning of an education in the stress of daily living. It is largely because learning secured in one situation may transfer to other situations that formal education is useful in life. If there were no transfer from the classroom to life situations, the usefulness of formal education would be narrowly limited. Hence we base our program on the idea that the student should be introduced to the various methodologies of thinking in order that he may acquire the basic tools in these fields of intellectual activity. We believe, however, that he need not learn all knowledge even in these fields because we can reasonably expect a transfer of experience from an old to a novel situation.

It would hold that there is no true education, but only unsubstantial specialization, unless through the various subjects comprising the high school and college curricula a community of understanding is established, an appreciation of the purposes, not of one branch of learning, but of the others as well. The inability of men at home and abroad to understand one another and to work together toward common ends results from their inability to communicate with one another. Their inability to communicate with one another is caused not so much by their use of different tongues as by the narrowness of their thinking. The cure for misunderstanding, local, national, or international, lies in a broadening of intellectual experience, a common world view.

Ortega y Gasset, one of the most astute analysts of social forces, dramatically describes the evil consequences of the narrowed scope of university training in Europe:

> Compared with the medieval university, the contemporary university has developed the mere seed of professional instruction into an enormous activity; it has added the function of research; and it has abandoned almost entirely the teaching or transmission of culture.
>
> It is evident that the change has been pernicious. Europe today is taking its sinister consequences. The convulsive situation in Europe at the present moment is due to the fact that the average Englishman, the average Frenchman, the average German are uncultured: they are ignorant of the essential system of ideas concerning the world and man, which belong to our time. This average person is the new barbarian, a laggard behind the contemporary civilization, archaic and primitive in contrast with his problems, which

are grimly, relentlessly modern. This new barbarian is above all the professional man, more learned than ever before, but at the same time more uncultured – the engineer, the physician, the lawyer, the scientist.[2]

If the citizens of one nation, to say nothing of those in other lands, are to achieve intellectual and spiritual unity, the educational system must acquaint them with the varied methods of interpreting reality. They need not possess an encyclopedic body of fact, but they must know how other men think.

Of the various disciplines represented in the college curriculum, the five types of methodology, though not wholly exclusive of one another, vary sufficiently to produce entirely different interpretations of the same object. The scientist, for example, looking at a tobacco plant may see only certain taxonomic characteristics; the artist, relationships of form and color; the philosopher, a cause for speculation on the significance of Kipling's remark that "a woman is only a woman, but a good cigar is a smoke"; the historian, the importance of tobacco in the economy of the American colonies; and the literary man, the play *Tobacco Road*. If the five were the normal representatives of their intellectual types, with their specialized interests, a conversation among them on the subject of tobacco would proceed on a very superficial level, would be boring to four while the fifth spoke, and would soon die of inanition. This simple example illustrates the intellectual provincialism of the so-called educated person. The grievous aspect of the philosophical chasms between learned men is not their ignorance of what and how others think, but rather their pride in their own specialism. These barriers to intellectual intercourse must be removed, if men are to understand one another and respect one another. Only by acquainting students with the various intellectual approaches by which man interprets reality, the scientific, the historical, the philosophical, the aesthetic, and the literary, can general education provide the basis for this understanding and respect. And only when it has introduced students to each of these modes of thought, we believe, can general education be said to achieve its second objective; namely, to teach students how to think, how to arrive at valid judgments, how, in short, to pursue wisdom.

---

[2] José Ortega y Gasset, *Mission of the University,* (translated by Howard Lee Nostrand), Princeton Uiversity Press, 1944, pp. 57-58.

Ethical Behavior

To think clearly is not enough. Man must use his intellectual powers in enriching his own life and that of other men. To do this he must be guided by a relatively constant set of moral values. Herein lies the need of the *third* objective of general education: to assist the student in developing a code of ethics and a consistent philosophy of life. All thinking persons realize that the most urgent and perplexing problems of our time have to do with men's ways of getting along with other men. International controversies such as the admission of Jews to Palestine and the rights of defeated nations like Germany are basically moral problems. Domestic difficulties of race conflict, labor strife, and food shortages involve questions of right and wrong as do many of the personal relationships of everyday life in the home, the shop, and the playground. Unless human beings can soon reach some common understanding of what is good and what is evil and unless their conduct is guided by such understanding, our civilization cannot survive. Though far apart in their spheres of influence, a student's cheating on an examination or one country's allowing another people to starve because they waged aggressive war are issues that are similar and should be dealt with on the basis of a consistent philosophy. The man who in theory embraces the tenets of the Sermon on the Mount and in practice votes for laws which create starvation and misery for many of his fellow human beings is obviously guided by no considered system of ethics.

General education must cultivate the traits of both mind and heart which constitute the basis of decent living. Few would question that in order to make judgments of good and evil, the student must be able to reason. Most would likewise agree that he must understand the conflicts which mankind has faced through the ages and the methods men have employed in resolving them and that also he must understand the Hebrew-Greek-Christian ethical traditions, which have shaped many of our political and social institutions. Yet knowledge and judgment, however important they are held to be in intellectual growth, are not enough, unless they function in a student's life. They are the basis of morality, but they do not assure it. Those who understand virtue do not always exhibit it in their own conduct. This inconsistency in human nature arises from the separation of thought and emotion. Its most dramatic manifestation is the person of high intellectual ability whose emotional life is so disorganized and misdirected that, fully conscious of his depravity, he nevertheless commits crimes of indescribable brutality. Less dramatic, but one of danger to all of us is the emotional indifference of many of our countrymen, old and young, to democratic values which, under stress, they would defend, but for which, with no stress, they feel little responsibility.

The lack of emotional reinforcement for intellectual solutions to moral problems has another undesirable result – moral instability. A student may accept the abstract concept of the dignity of man in one set of circumstances while disregarding it in another or rejecting it entirely in his own activities. This lack of any steady philosophical outlook results from his failure to apply a general concept to a particular situation and, probably even more important, from the failure of education to arouse within him any deep-seated convictions or impulsions to right action. This complete detachment of judgment, essential in science, when transferred to other disciplines concerned with human values, has a dispiriting influence on youth who wish to give meaning to their lives and expression to their energies by identifying themselves with a cause. It is this demoralizing of students' attitudes that must be the concern of general education. The ethical nihilism which has characterized much of the thinking in colleges since the first world war in no small measure accounts for the aimlessness, the neurotic indecisiveness, and the confusion of our time.

To argue that college instructors have a responsibility for the spiritual and moral development of youth is to advocate neither the blood-and-thunder dogmatizing of religious fanatics nor the pollyanna vaporizings of well-meaning, but unrealistic uplifters. In discussing this matter Robert Redfield, Dean of the Social Sciences at the University of Chicago, points out the flabbiness of much current instruction:

> It sometimes seems that the professional students of humanity and society would rather study almost anything but that which is most characteristically human and social. In their eagerness not to preach the good, social scientists avoid studying the nature of the good. In their desire not to moralize, they omit morals from their subject matter. It is as if, because there is such a thing as sentimentality, the sentiment should be excluded from our concern.[3]

General education recognizes the need for giving logical direction to students' minds; it would also recognize as essential the need for fostering at the same time an awareness of what is right, of what is evil.

Where does the responsibility for such instruction lie in a program of general education? Many institutions, especially those with a close religious affiliation have placed the responsibility in departments of religion or theology, all students being required to take instruction in these fields. Other institutions have attempted to achieve the same end by requiring the study of ethics. This practice a president of Princeton University properly appraised when he said in a statement to parents that a spraying of theology three hours a week would not guarantee that their sons would live exemplary lives. Such instruction, whatever its academic value, often fails because of its remoteness from other subject matter and from the actual moral problems faced by the student from day to day.

---

[3] Robert Redfield, "Social Science in the Atomic Age," *The Journal of General Education,* Vol. I, No. 2, p. 124.

General education would make no attempt to segregate morality into one limited group. All teachers whether of English, science, history, or philosophy have an equal responsibility for education in morality as well as for maintaining high standards in their own conduct. As Mill said many years ago:

> It [a university] should present all knowledge as chiefly a means to worthiness of life, given for the double purpose of making each of us practically useful to his fellow-creatures, and of elevating the character of the species itself; exalting and dignifying our nature. There is nothing which spreads more contagiously from teacher to pupil than elevation of sentiment: often and often have students caught from the living influence of a professor a contempt for mean and selfish objects, and a noble ambition to leave the world better than they found it, which they have carried with them throughout life. In these respects, teachers of every kind have natural and peculiar means of doing with effect what every one who mixes with his fellow beings, or addresses himself to them in any character, should feel bound to do to the extent of his capacity and opportunities.[4]

How is such education to be made a part of a general plan? Much teaching misses its mark because it fails to instruct the student in such matters as the dignity of the individual, respect for the rights of others, cooperation in social enterprises, concern for the underprivileged and the weak in body or mind – all factors in decent and democratic living. It is important that youth understand such a document as the Sermon on the Mount as something more than a declaration of abstract principles; he must recognize it as a guide in the lives of normal human beings; he must realize that to live according to its philosophy is to achieve deeper satisfaction than to live dominated by selfishness, carnality, and materialism. Such ideas as these, basic in his development, he has the right to expect from education not only in the classroom, but throughout the institution. A most effective experience for pumping freshness and vigor into the splendid old abstractions of liberty, equality, and fraternity is open in student organizations and other campus activities. The atmosphere of a campus, the influence of worthy teachers, and a student life organized to safeguard the rights of all regardless of creed, color, or social status will be more effective in teaching students how to live decently than whole courses of lecturing or preachment. In these days of the reappraisal of values and the redirecting of life, a program of general education must include both in classroom instruction and in all the activities of institutional life a persistent emphasis on goodness as well as on truth.

---

[4] John Stuart Mill, Inaugural Address at the University of St. Andrews. Longmans, Green, Reader, and Dyer, London, 1867, pp. 76-77.

Appreciation of Beauty

Essentially different from the scientific, historical, or philosophical is the artistic view of life, and since students must be prepared for the quest of beauty as well as of truth and of goodness, general education takes as its *fourth* objective the meeting of this need. It would seek to increase the student's awareness of beauty and his desire to create it. With few exceptions, colleges provide little opportunity for study of the fine arts. Even where such instruction is available it emphasizes the training of artists or those who wish to specialize in art rather than the education of those who wish to gain an appreciation of one or more of the fine arts or the discovery of those who may have creative talent worthy of development. Indeed students who are able to sing, paint, or play a musical instrument with skill often have to neglect these talents while completing a highly intellectualized liberal education. At best many have opportunity to further their interest in the fine arts only in extracurricular activities such as the glee club, orchestra, or dramatic society, activities generally viewed as unworthy of academic credit but tolerated as harmless means for the expenditure of youthful energies, which might otherwise flow into more troublesome channels.

During recent years some colleges have begun to be concerned about the aesthetic development of students, with the result that courses in the appreciation of music and of art are growing less uncommon. To supplement classroom teaching and to accustom students to having beauty around them, many colleges have acquired paintings, etchings, and other works of art to be hung in dormitory rooms. This is a practice which the Carnegie Corporation has encouraged by providing sets of color reproductions and also sets of recordings of representative musical compositions for use in classrooms and recreation halls. Other efforts to increase aesthetic awareness and appreciation take the form of concert series, theatrical productions, and the artistic development of buildings and grounds. This is tangible evidence that colleges are becoming conscious of the importance of art in the lives of all students, regardless of their future vocations.

Too many young men and women, however, continue to leave our institutions of higher education with only a superficial interest in art and with little capacity to create beauty in the studio or in their own homes. Beauty enriches, ugliness impoverishes the lives of men. The capacity to appreciate and to create beauty is not inherited; it must be cultivated.

Though differing in subject matter the appreciation of painting exercises the same faculties as the understanding of mathematics or history; the precision, the adherence to law is no more stringent in a chemistry or physics laboratory than in the composition of a musical score. In either case, though, in the appreciation of the compositions of others or in the creations of his own, a student will be aware of an additional kind of experience, the intuitive, the emotional, the imaginative, the characteristic stuff of artistry. Though the two cannot be completely divorced, the aesthetic faculties deserve cultivation and expression as much as the intellectual. The study of art does as much to free the mind from provincialism, inflexibility, and emotional immaturity as does the study of other subjects.

Moreover, opportunity for artistic expression is needed now more than ever before in American life. Atomic energy, if it is able to survive its own destructiveness, will provide increasing leisure for all. Unless this time, now occupied by the activities of earning a living, is used constructively our society will suffer increasing boredom, uncertainty, frustration and conflict, a fitting state for slow degeneration like that of the pleasure-loving and effete Roman Empire. Art, representing as it does the noblest forms of human activity — great tragedies, great cathedrals, great symphonies, great paintings — may provide a means for maintaining an emotional balance and a high spiritual life among our people. The effect which artistic expression has in releasing emotional energy in healthful activity is well known. An art-conscious society should be an intellectually mature and an emotionally healthy society, one in which elevating aesthetic and spiritual values might replace the materialistic striving of too much of our modern world. If it is to serve this important social purpose, art cannot be a veneer with which a few aesthetically sensitive individuals try to beautify an ugly bourgeois culture; all citizens must be conscious of aesthetic values and try to realize them structurally in their own lives. General education would introduce the average student to the principles of art, acquaint him with the elementary techniques and skills in at least one of the fine arts, provide opportunity for creative activity, and inspire in all a continuing interest in art and a desire to create beauty within themselves.

Physical and Mental Health

In recognizing the importance of health in a life of well-being, general education would have as a *fifth* objective: the cultivation of habits essential to physical and mental health. Education alone, we realize, cannot prevent physical or mental weakness; but the preventable disease and infirmity among many who have had the advantages of high school and college indicates that these institutions are lax in discharging their responsibilities for the public health.

What is required to prepare the student for a life of physical and mental efficiency? He must understand the nature of living tissue, its development from previously existing cells, the processes of human reproduction, digestion, respiration, and nervous activity. He must realize the importance of mental hygiene, not only in the prevention of mental disorders but in the normal process of living a full and happy life in a world of irritation and insecurity. He must learn the means of normal escape from tension and frustration, and from what has grown to be a modern paradox, feverish activity combined with sedentary habits. To offset the disabling effect of strain and overwork in his later life, and to make profitable use of time outside of work, he should be able to find suitable activities for relaxation. With the college years representing only a segment of life, he should, in our opinion, be oriented toward his adult recreational needs and preferences. Few men or women will play football or basketball after college.

A college program of health education must, therefore, be organized around the life of the student, but it must be directed toward life after schooling has ended. It must keep the student physically and mentally fit but it must provide the knowledge, skills, and motivation needed for a continuation of healthful practices throughout life. No program which does not meet these two objectives can be considered successful.

Although nearly all colleges have the facilities to conduct a comprehensive program of health education, their resources are usually scattered among a number of agencies. Departments of biology, for example, offer instruction on human reproduction, digestion, respiration, and the functioning of the nervous system. But often the student has to spend weeks becoming acquainted with the amoeba, the paramecium, and

Crustacea before he gets to the subject matter of consuming interest to all human beings, the structure and the functioning of their own bodies. Likewise in bacteriology, pathology, hygiene, and nutrition, the scientific facts which the average citizen should know are available only to students who have completed several prerequisites or related courses. Knowledge of the conditions of mental health, the causes of maladjustment, the influence of heredity and environment on human development, and of many other facts and principles useful to those who wish to live a balanced life is too often available and understandable only to persons who intend to make the study of psychology their life work. Indispensable for the few who need it, such high specialization does not provide adequately for the many students who leave college in ignorance of the physical and psychological basis of good health. To meet the needs of the general student departments of biology, bacteriology, biochemistry, home economics, hygiene, psychology, and psychiatry must unite their efforts; they must organize and present a unit on healthful living on a level suited to all college students, for most of whom it will be their only instruction of this type.

With their course properly planned, students will leave school with an intelligent notion of themselves as human beings. They will have an understanding of what it means to be fit. But the responsibility of an institution is not finished. It must establish the skills and habits that the adult will need to keep him physically sound and provide recreation to divert his mind from the tension of modern affairs. These needs must underlie the arranging of the schedule to direct students to these goals.

In conformity with the principle that conditions should approximate those of post-college life we believe that classes in physical education should not spread over the whole day or be limited to one or two hours a week for each student. Under such a plan the student spends most of the time going to the gymnasium, getting warmed up for the hard exercise which he does not get, and taking a bath before he returns to his other classes. A more compelling reason, however, for having classes in physical education in the later part of the day is that when the student leaves college to take up his life work he will exercise in unprescribed amounts at that time, if at all.

In fact, students should become accustomed to thinking of physical education in terms of what it should later be – a recreational activity carried on after working hours for purposes of health and pleasure. They should be encouraged to arrange their study schedules and their social activities in such a way as to be able to spend several periods a week, of several hours each, in physical activity – games, sports, or gymnastics. They should have as additional incentive participation in intramural competitive sports organized around classes, fraternities, and dormitory groups. Under this plan many students who now complete the normal two years of physical education and never again return to the gymnasium except as spectators would participate in games and sports throughout their college days and in their adult years. To make physical education attractive a staff of competent and spirited men and women should be engaged, interested not in the training of professional athletes but in the education of all youth for physical fitness. Through such a comprehensive program of health education both for those in good health and in good physical condition and for those with physical disabilities capable of improvement or cure, we believe the physical and mental health of the individual the country over can be raised and the human resources of the nation conserved.

Good Citizenship

Of all the objectives of general education none is more important than the *sixth:* to prepare the student for the responsibilities of citizenship, for only in the good society can the individual reach his fullest personal development. Citizenship is a complex thing. The good citizen must know about his land, its origin, history, and traditions. He must understand his proper relationships with the other members of the body politic. He must be conscious of the aspirations of his immediate community and the nation at large and loyal to their ideals and purposes. He must work unselfishly for the common good sometimes even at his own expense. He must advance the democratic ideals of the dignity and the worth of each individual human being, and, if necessary, he must give his life in the defense of these ideals as so many of the youth of this nation have recently done. For these responsibilities to the communal life general education must prepare all students.

To the material well-being of society each citizen must also contribute through work. We have considered the place of vocational training in the program of general studies, and have concluded that young people should be given every opportunity to learn about various vocations, the necessary prerequisite training, the conditions of employment, and the income they provide. Yet, with liberal education already too much at the mercy of vocational training, we are excluding from our general program all courses having as a primary purpose education in how to earn a living. Rather we advocate those courses which, as their primary purpose, offer young people preparation for activities that will lie outside of their vocations and that, as citizens, they will share in common with all other human beings.

In the best sense, however, general studies do prepare the student to earn a living, for the qualities of mind and character that determine vocational success are to a very large extent cultivated in the nonvocational subjects. Those who are technically competent often fail to advance in their chosen work because they lack the human qualities which make for satisfactory personal relations. Traits of personality such as tact, fairness, and courtesy will carry one along the path to vocational success much more rapidly than technical competence alone. An alert and cultivated mind, the ability to reason, the capacity to work with others, and a well-integrated and purposeful personality, human qualities which general studies are supposed to cultivate – these are assets by no means unimportant in the matter of making a living and of becoming a citizen of social and political integrity as well. Technical preparation for the various vocations we leave to the special departments, schools, and institutions established for this purpose.

It must be obvious that the cultivation of the complexity of knowledge, attitudes, and traits which makes up citizenship cannot be left at the doors of any one department or indeed of any one institution. It is nurtured by all the forces which play upon human beings from their earliest years. The church and the home, for example, have a large part in the inculcation of the motives and ideals at the basis of good citizenship. These institutions often exert their influence more profoundly than the school. But, regardless of the influence of other institutions, formal education cannot escape its own responsibility for the making of the good citizen.

In carrying out any plan for instruction in citizenship, a college must employ all its varied resources in the discharge of its full obligations. The classroom, with the many diversified claims on its efforts, can at best meet only a part of the requirements. Though lectures in political science may teach the student about the machinery of democratic government, too often such courses have failed to stress the making of good citizens; indeed, they have sometimes been the excuse for not attacking the problem more directly and more vigorously. Formal courses in American civilization not directed toward civic responsibility are no more successful in achieving this end. As essential as the classroom is, the college has much more to offer. The entire educational program and the atmosphere of an educational institution must be employed in shaping the qualities of mind and heart that lie at the basis of a concern for the public good. The manner in which the officers and the faculty conduct their personal relations among themselves and with students may exert a more profound influence on developing attitudes toward government and society than formal instruction. Participation in student government will often provide an educative experience in the practical problems of politics. Forums and discussions in which the major political and social issues of the day are analyzed and discussed also contribute knowledge and experience in the give and take of political life essential to the practice of intelligent citizenship.

Through all of these opportunities for growth in civic responsibility the student should grasp the spiritual rather than the mechanical aspects of the rights and obligations of being a citizen. Whether a man or woman votes is no more important than what he votes for. What he votes for will be determined by what he knows about the issues at stake, his ability to examine these issues critically and unselfishly, and his willingness to submerge his own desires in the common good. For the development of these qualities general education has primary responsibility and all its forces must be marshalled to this end. All the units of instruction we have described, all the best efforts of the best instructors, all the spiritual forces of an institution must be employed in preparing youth for a life which will be satisfying to the individual and of worth to the society in which he lives. If all the members of the institution, faculty, and students alike were to keep before them the good society described by Pericles in his funeral oration for the youth of Athens who died in the defense of democracy, then the youth of America might leave these institutions girded with a knowledge of the ways of democracy and moved to good citizenship by its imperishable ideals.

> Our constitution is named a democracy, because it is in the hands not of the few but of the many. But our laws

secure equal justice for all in their private disputes, and our public opinion welcomes and honours talent in every branch of achievement, not for any sectional reason but on grounds of excellence alone. And as we give free play to all in our public life, so we carry the same spirit into our daily relations with one another. We have no black looks or angry words for our neighbour if he enjoys himself in his own way, and we abstain from the little acts of churlishness which, though they leave no mark, yet cause annoyance to whoso notes them. Open and friendly in our private intercourse, in our public acts we keep strictly within the control of law. We acknowledge the restraint of reverence; we are obedient to whomsoever is set in authority, and to the laws, more especially to those which offer protection to the oppressed and those unwritten ordinances whose transgression brings admitted shame....

We are lovers of beauty without extravagance, and lovers of wisdom without unmanliness. Wealth to us is not mere material for vainglory but an opportunity for achievement; and poverty we think it no disgrace to acknowledge but a real degradation to make no effort to overcome. Our citizens attend both to public and private duties, and do not allow absorption in their own various affairs to interfere with their knowledge of the city's. We differ from other states in regarding the man who holds aloof from public life not as "quiet" but as useless; we decide or debate, carefully and in person, all matters of policy, holding, not that words and deeds go ill together, but that acts are foredoomed to failure when undertaken undiscussed.

These six objectives, then, we consider to be the proper ends of general education in our time. If the youth of today are to be able to converse together concerning their common life, their common problems, and their common destiny we believe that they must possess this common body of knowledge and these common personal and social ideals motivated by the high purposes of democracy and skilled in the ways of democratic living. With these experiences we believe they should be better able than their forbears to achieve a personally satisfying life while playing their part in the improvement of society and the world. Without these common ideals and ideas they must go on, as we have, misunderstanding one another and working at cross-purposes to their own unhappiness and to the detriment of their contemporaries. The remainder of this volume will consist of a discussion of the courses of study we have designed for the achievement of the objectives set forth in these first two chapters.

3. Language and Communication

IT SHOULD SURPRISE NO ONE THAT THE FIRST PARticularized consideration in a book on a pattern for general education should concern itself with the subject of communication. Communication is the portal to most knowledge and hence to most understanding. Unless the student can read and listen with perception, books and lectures will be of little avail; and unless he can write and speak with facility his usefulness as a scholar and citizen is impaired. Like other forms of education, therefore, general education in the American college must first make certain that the student is sufficiently skilled to take advantage of the training processes and to participate actively in them. In a very real sense, skill with language is at once an appropriate part of the business of general education and a prerequisite to it. Thus it becomes doubly important.

To throw the problem into perspective, let us first define what seem to be the proper objectives within this area. Precisely what skill and understanding of language should the college student possess in order to be the effective scholar and citizen that we should all like him to be? Or, so that the answer will be in operational terms, what should the college student at his best be able to do? First, he should be able to listen and read with critical intelligence. By this we mean that he should be able without crushing effort to discern the purpose of the writer or speaker, to follow the organization of his ideas, to perceive the relevance of his illustrations, to distinguish fact from inference, to spot meaningless or deceptive generalizations, and to resist the double talk and emotionally charged terms of the demagogue. Second, he should be able to speak and write clearly and with considerable effectiveness. By this we mean that he should be able to clarify his purpose and organize and formulate his ideas so that his aims with respect to any particular audience are achieved to a degree that he finds intellectually and ethically satisfying. Third, partly as a means toward the development of the skills just mentioned and partly as a cultural end in itself, he should know something about the nature of the language: its components and its history, its relation to race development and to human thought and adjustment.

The Not So Typical Freshman

Anyone who has ever encountered the American undergraduate will quickly recognize the difficulties if any program of general education is to maintain these as practical goals. Certainly there is nothing reassuring about the heterogeneous crowd of freshmen which appears on the typical American college campus the opening day of school. Though most of these first-year students have completed the traditional four years of high school, they are as varied in their abilities as one can imagine. A few may already have broken into respectable publication; others are unable to spell some of the simplest of monosyllables. Some are able to express themselves like seasoned orators; others tremble at the thought of talking before a group. Some are able to read intelligently at the rate of five or six hundred words a minute; others must form each word with their lips in order to convert the print into sense. Discouraging as the picture may be, this is the reality which we must try to understand before proposing a curricular remedy.

Why are our college freshmen not more uniformly adept in the verbal skills? Some of the answers are obvious. In the first place, skill in communication is to a large degree the result of verbal intelligence, and it in turn is a factor of native ability. Some students, in short, were lucky in their choice of parents whereas others should have been more circumspect. Some have had the advantages of good English in the home and community; others with often considerable native ability have grown up where standard English is rarely spoken and never written. Indeed, it would be no exaggeration to say that few students before they reach college have much need for a language other than their neighborhood patois.

Communication, Step Child of the Secondary Curriculum

But what of our schools? someone may ask. Have not these students been through twelve years of public schooling and should they not, therefore, know at least the rudiments of communication? The answer is that the elementary and high schools are accomplishing much. What these students would be like without a secondary training in language is something that college English teachers would prefer not to contemplate. But even the best friends of the public schools will admit that there is still a great deal to be done. At the present, most high schools throughout the country are requiring at least three years of English. Of these, usually the first year and often the second are devoted in large measure to composition with its concomitants of grammar, spelling, and punctuation. On the surface one would suppose this to be adequate, especially since most students have been exposed to the fundamentals of language in the grades. But the facts belie the supposition. High school training in communication is with few exceptions a dull routine of drills, reports, and tests, from which there is a minimum of transfer to actual performance. Few assignments seem to stimulate the student's perception or prod his thinking. On those infrequent occasions when a theme is assigned, the result is little more than a rambling account of a personal or imaginary event in which the premium is on whimsy and not on logic or stylistic accuracy. The teacher says she wants the themes to entertain her; so Johnny imagines that he has adapted atomic energy for use in the family dishwasher and Sylvia writes of a heavenly trip over the Victoria Falls on a magic carpet. Often big words for their own sake are sought, with the dreadful results that a hoe becomes a horticultural implement and a broken-down '33 Plymouth becomes an automotive vehicle. If the results of a recent survey of freshmen at the University of Iowa are reliable, the typical college freshman has written in high school fewer than ten compositions requiring any measure of intellectual discipline; of these only one-half could properly be called expository and none could legitimately be called a problem in argumentation.

The other verbal skills – reading, speaking, and listening – are handled even more casually. To be sure, a student is required to read certain books and a check is made on his comprehension through book reports, class discussions, and an occasional test. But in very few high schools is there any carefully arranged reading program which is built on sound psychological principles and which is committed to improving not only the comprehension of the individual student but his rate of reading as well. Reading is apparently something that we hope the high school student will "pick up" along with sleeping late and jitterbugging. About half the students entering college have had a course in speech. This means speech in the generic sense since the course may have been anything from declamation to dramatic arts. A few have had training in debate. But the great majority remain untutored, with the result that before even the smallest group they are shy, frightened, often inarticulate. Those with minor impediments have never been told that with the proper practice they can eliminate their difficulties; those with major disorders have rarely received wise counseling. Apparently speech, too, is something to "pick up." And the same may be said for listening.

To make the matter still worse, students rarely have any of their formal work in communication, aside possibly from a speech or journalism course, in the last two years of high school since junior and senior English are almost invariably courses in literature.

At least two years intervene, therefore, between the high school composition course and freshman English in the jump between high school and college.

Finally, high school preparation is inadequate because of the inordinately heavy loads placed upon the teaching staff. High school English teachers on an average teach five sections a day; their sections are large and their pupils diverse. In addition, they are often asked to coach debate, direct class plays, sponsor clubs, supervise the cafeteria, proctor study-halls, coach the basketball team, and speak to the P.T.A. on the "The Meaning of Shakespeare for a Machine Age." To do all this and to read compositions too is almost physically impossible. Five sections with about thirty students to a section equals 150 students. To check a paper of any length rigorously for organization and stylistic accuracy, ten minutes at least should be allowed. That means 1,500 minutes or 25 hours for grading should a teacher decide to require a composition from each of her students. Can she be wholly blamed for resorting to class drills, however routine and ineffectual they may be? Partly she can be, for short papers, student criticism, visual aids, and class discussions can accomplish much – possibly even more than her marginal comments. Partly, however, the fault is clearly with school boards that make such burdens possible and with administrators who plan the curriculum so that even the brightest student has sufficient time to forget most of what he knows about language before he graduates.

Whatever the cause, the fact remains that the majority of students coming to state universities and even many going to the highly selective private institutions are inadequately equipped in the fundamentals. If the college, consequently, wishes seriously to attain such objectives as we listed above, it must stand ready not only to give its students a high-powered course in the techniques of effective communication but also to offer instruction in the most elementary matters. Thus, it must stand ready to do a job that it does not want to do, and that it should not reasonably be expected to do or to give college credit for.

Actually, the colleges are caught in a contradiction that keeps them and the high schools mystified about what can best be done. On the one hand, the colleges because of the inadequacies of their freshmen must offer a course in what seems to be high school if not grade school instruction in such matters as grammar, punctuation, and spelling. In a very real sense, therefore, much of the time of the college course is taken up in having the student overcome deficiencies in his previous training. This is true whether a school maintains a so-called subfreshman course or not. In other words, the freshman English course in part or in whole is a deficiency course, and to the extent that it is, it cannot logically be offered for college credit. In the abstract, most college administrators will agree to this. But show them their own catalogues and point out that the freshman English course is listed for full credit, and they will protest vehemently that the course deserves full credit since it is infinitely superior to anything that the high schools can possibly offer. This is academic double talk. If college faculties cannot discriminate well enough between high school and college level work to adjust their credit svstem accordingly, they had better for the sake of good manners keep quiet about what the high schools are doing or not doing. Knowing so little about what deserves college credit, how are they in a position to tell whether the high schools have done their job?

A Mutual Assistance Pact

The very first task that must be done is for the colleges and the high schools together to decide what in this area the high schools can reasonably be expected to do. Once that is accomplished, the high schools can plan their curriculum with more intelligence and the colleges can award their credits without having to look both ways at the same time. The method of doing this should not be hard. The state university might well take the lead (as the University of Michigan already has) by inviting representatives from the colleges and secondary schools within the state to a general conference where the specific elements involved in the high school level of achievement might be worked out. The results of this conference could then be sent to the appropriate high schools and colleges with recommendations for suitable action. In the case of the secondary schools this action would involve, where necessary, an adjustment of the curriculum so that all the students could be trained toward the level of proficiency agreed upon. In the case of the colleges, it would involve the introduction of diagnostic examinations designed to disclose whether the particular student has actually reached this level. If the examinations reveal that he has, he should be permitted to proceed with the regular required college course for full credit; but if they reveal that he has not, he should be placed in an elementary course where he will labor without credit until he overcomes his difficulties. Furthermore, the results of the college examination should be sent back to the high schools, at least by the state institutions. If this were done regularly and in a friendly spirit, it would not be long until the information got to school boards and to the public at large. Then there might be substantial hope for improvement at the secondary level, with a consequent diminution of deficiency work in the colleges. Unless some such cooperative effort takes place, we can foresee only a continuation of the present muddle with all of its backbiting and confusion.

There would be difficulty, of course, in being definite about what high schools reasonably can be expected to accomplish. Vested interests, carefully cultured peeves, phobias, and obsessions of all sorts would toss the discussion up one blind alley after another. But eventually the road out should disclose itself. For the purpose of starting the discussion we should like to make some general suggestions of our own. Could the high schools reasonably be expected to be responsible for the following?

1. A knowledge of basic terminology. Words like *subject, phrase, semicolon, exposition,* and *transition* should be more than just letter combinations in the student's mind. Teachers in other areas have a high respect for the terms of their craft because they know how useful those terms are. But English teachers have developed a horror for what might lead to analysis and away from what they call "appreciation." If the student can do, the argument runs, why worry about whether he knows what he is doing? Granted. But the great

majority of the students cannot do — at least cannot do well enough. So they had better learn a little more about the craft of communication so that they *can* do. This is not a plea for memorizing the traditional terms of classical grammar. There is reason to believe that the functional approach taken by Fries and others makes better sense and in the long run develops better writers and speakers. At the very least a student should have a vocabulary ample enough to permit him to take apart one of his own paragraphs or sentences and explain with precision what the parts are and how they are related to the whole and to one another. It is difficult to see how he will improve his work appreciably in the relatively short time allotted to formal study unless he can first of all be articulate about it.

2. Reasonable competence in handling expository discourse, either oral or written. This involves a recognition of what exposition is in terms of its purpose, material, and audience. It also involves a sense for form: a definite beginning, middle, and end. In this latter regard it is especially important to have the student realize that there are many ways in which expository subjects can be developed, and that a little story, however ingenious, will not always suffice.

3. An abiding respect for the standard English prose sentence in both written and oral discourse. It seems reasonable to expect the high school graduate to know what standard usage is, what occasions make it appropriate if not indispensable, and what characteristics make it more flexible and precise than colloquial or vulgate usage.

4. Ability to write without impeding communica-

tion by gross malpractice in mechanics: punctuation, capitalization, spelling.

5. Ability to present a brief informal oral explanation without too much hesitancy and with the words articulated well enough to be understood without strain.

6. Ability to read with adequate comprehension and at a reasonably efficient rate unless handicapped by poor eyesight. Adequate comprehension should imply the ability to discover the unifying theme of an expository discourse, its main divisions, and the point of the chief illustrations. A reasonably efficient rate might be a minimum of 250 words a minute for nontechnical expository prose.

7. Ability to listen with sufficient concentration to pick out the unifying theme and the main divisions of an expository discourse.

It will be noticed that in these seven items we are asking only for utility communication. No one should be squeamish, therefore, for fear that such a procedure as this is too mechanical and hence is likely to inhibit the extraordinary students from flights of imagination. If there are those who indulge in such flights, by all means they should be encouraged. At the same time, it should be impressed upon them that the college for good and obvious reasons is interested first of all in their ability to communicate a simple expository idea in a clear, accurate, and orderly manner – and that if they cannot do this, they will be plumped into a noncredit course where they will languish until they can.

Let us repeat. We believe some such code as this, though more detailed, is necessary so that the high schools can see what the colleges want and so that the colleges can make a sharper distinction between what is essentially college work and what is not. At present, in the institutions where freshmen are admitted on a highly selective basis, possibly one-fifth to one-fourth of the students would not come up to the standards we have suggested and would hence have to take at least a semester of noncredit work. In the state universities, the proportion might run up to fifty or sixty per cent. To this suggestion there will undoubtedly be vigorous protest. What, put fifty per cent of the students in a noncredit course? Tell the *average* student he is deficient? Precisely. We are not content with the average and neither are the high schools. What is more, we do not believe that we shall ever raise the average by accepting it. A clear-cut code, the joint product of high school and college teachers, will give direction to the precollege student's work, and a knowledge that the college operates by that code will motivate it. We should like to indulge in a bit of speculation by predicting that within five years after a carefully detailed code has been agreed upon in a particular area the proportion of college freshmen required to take the noncredit course will be cut in half.

Data for Diagnosis

Once an agreement has been made with the high schools concerning standards, the college must build a set of diagnostic tests which are comprehensive enough and reliable enough to measure each student's abilities and disclose his particular weaknesses. Since we shall discuss the general problems of testing in another chapter of this book, we shall take time here only to point out a few of the special problems of testing in the communication skills area.

So that the tests may be administered and scored rapidly, as many as possible should be objective. Many aspects of the work can be adequately measured in this way, especially reading rate, reading comprehension, listening comprehension, and vocabulary. But objective tests, at their best, measure only recognition and comprehension; they do not necessarily predict a student's level of performance in writing and speaking. It is safe to say, for example, that if a student cannot recognize errors in writing, he probably will not be able to avoid them; but it does not follow that if he can recognize them, he can avoid them. At least, correlations between objective tests on the one hand and themes and speeches on the other are still too low to allow us to omit the latter. Consequently, the student should be asked to write at least one theme and preferably two, since an average of two scores is likely to be a more reliable index of ability than one score. One speech should be sufficient to see whether or not the student can adapt his subject and material to a specific audience and can present it with assurance. Where voice deficiencies are indicated, however, the initial speech should be supplemented by an oral reading or a voice recording so that more specific data can be assembled. Indeed in no aspect of communication should anything be left undone that would be helpful in allowing the staff to understand and to evaluate the student's particular need and problems. Even hearing, health, and psychiatric tests are not outside the scope of the communication problem.

To recapitulate, we think the following battery of tests a necessary minimum for a full and accurate understanding of whether the individual student measures up to the standard for college work:

- Objective tests
    - Reading rate and comprehension (including vocabulary)
    - Listening comprehension
- One or two expository themes
- One expository speech

Once measured by tests such as these, the student should then be placed according to his abilities either in a deficiency course or in the required college course in communication. For purposes of discussion we shall refer to these as the Fundamentals of Communication course and the Language and Communication course – though we hold no great brief for the titles. The former would be a noncredit course designed to help the student make up the deficiencies which exist because of inadequate background and high school training. The latter would be a full-credit, required course aimed more immediately at the development of high-level skills in communication and ultimately at the objectives we have established for the whole area of general education. In the following paragraphs we should like to suggest what these courses might be like.

A Course in the Fundamentals

We do not conceive of the Fundamentals course as simply a routine run-of-mine program for dullards.

Indeed this would be a false conception inasmuch as many bright but poorly trained students would have to take it. The course should be lively, interesting, and not at all committed to workbooks and other dreary paraphernalia of the trade. Both for this course and for the advanced one we like the basic principles which have been worked out and put into practice by Professor E. C. Mabie in the Skills course at the State University of Iowa. In explaining the Iowa course Mr. Mabie writes:

> The teaching program endeavors to *integrate* the various approaches and methods in the teaching of reading, speaking, and writing. This course undertakes tasks which are broader than those undertaken in commonly organized courses in English composition and in fundamentals of public speaking. The course is *student centered,* recognizes the wide range of *individual differences,* and adapts material and procedures as dictated by those differences. It therefore discards uniformity and should not be confused with or thought of in terms of the older courses.

Following this lead, we propose two basic principles for the Fundamentals course: integration of the work in the four communication skills insofar as that is possible, and instruction aimed at the individual student's needs.

Integration

To integrate the work in the various skills one must first recognize the fact that the really basic problems of communication are common to the several skills. There is first of all the purpose of the person doing the communicating and second the means he uses in achieving this purpose. The purpose will be substantially the same whether he speaks or writes, whether others listen or read. His means, too, will in many respects be the same: the content, the arrangement of the content, the words used in giving symbolic formulation to the content. Only when he encounters the task of, say, pronunciation on the one hand and punctuation on the other does he employ means which are singularly different.

This emphasis upon integration may also be projected from the course as a whole into the treatment of any particular problem in the course. It has been rather well demonstrated by this time that the atomistic approach to grammar, for example, does not produce particularly gratifying results. True, the student may labor over handbooks and workbooks and learn to do workbook exercises with surprising facility, but the transfer between that ability to the ability to communicate is low. What the student needs first is a firm grasp upon an idea, and then a rather clear notion of how he wants to develop that idea. Once the student has something he wants to communicate and something that he has thought through, most matters of stylistic accuracy are likely to take care of themselves. In those cases where they do not, he can then employ suggestions with profit, because he will see them as useful means rather than as dreary and despotic ends. What we are suggesting here is that the approach to any major assignment in this field should be through matters of purpose, content, organization, and language, not through details of the comma or of articulation. Similarly in reading and listening, the approach should be through a discovery of the larger aspects and not through an explication of single sentences. Even in so-called clinics we have observed that the student progresses more quickly when the tutor discusses mechanical difficulties in the light of more fundamental problems of discourse.

Individualization

We have just been saying that the approach to communication should be so designed that the basic problems for discussion would be those which are common to the four skills and not characteristic of only one or two of them. This does not imply, however, that the separate skills should receive no attention as such, or that the emphasis upon each should always be the same. If this were so, it would be impossible to treat a student for his individual deficiencies. Coupled with an integrated approach, therefore, we recommend a system of sections and clinics which will give each student, insofar as this is possible, the proportion of practice in the various skills which the diagnostic tests indicate that he needs. On the basis of the tests, for instance, students might well be sectioned into small homogeneous groups in which the needs are general or where they are primarily in speech, in writing, in reading, or possibly even in listening. A student in a class designed for those especially weak in speech, for example, would consider the general problems of communication just as thoroughly as the students in any other section, but in the application of these problems he would spend more time upon speech than he would upon writing, reading, or listening. He would speak oftener than students in sections which emphasize writing or reading; he would inquire into various aspects of speech in order to discover and to talk about his own particular deficiencies; and he would constantly be reminded of the basic problems of speech since all the other students in his section would be concerned with and talking about them also.

To supplement the regular class work we recommend a system of clinics where students may receive individualized help on a voluntary basis. Certainly such aid should be available to those whose reading rate is especially low, to those who have had almost no training in writing problems, and to those who are afflicted with stuttering, lisping, and other speech disorders. Furthermore, we suggest that the various clinics be open not only to students in the Fundamentals course but also to those in the Language and Communication course, and to the entire student body.

In the past, the chief difficulty in a noncredit course of this nature has been the attitude of the students. Naturally, a student wants to see his work directed toward graduation requirements, and a just reward in terms of credits for all honest effort he considers only his rightful due. Basically the credit system with all its attendant nonsense is at fault here; it would be pleasant to be able to think that some day the majority of American colleges will see fit to rid themselves of the credit incubus and be more concerned with the actualities of the student's progress. Since we cannot bring ourselves to believe, however, that such reform is generally imminent, we must mold our suggestions to what we now have and are likely to have in most schools. How can we overcome the student's natural disappointment if not resentment at having to take noncredit work? The good teacher will be able to dissipate much of this feeling by keeping before the student that his place in the Fundamentals course is no reflection upon his character. He is not necessarily stupid; he simply has not had opportunity enough to practice standard English communication. Here, now, is his chance. Once the student is wisely oriented in the course and his imagination is stirred by special writing projects, panel discussions, slides, motion pictures, and a host of other devices that can be employed profitably motivation should not be too difficult. If for no other reason, the student will be motivated because he wants to get out of the course!

Examination

At the end of the term, each student should take an examination which is comparable to the one he took when he matriculated. Indeed, it might be well the same examination which students entering at the beginning of the next term are required to take. There would be no need for fancy distinctions; either the student fails or passes, and degrees of success in passing are largely beside the point. At least here one can rid himself of the semiannual headache over letter grades. If the student passes, he automatically goes into the Language and Communication course; if he fails he takes more work in the fundamentals. If he fails after the second semester's work, his status as a college student should be seriously in doubt, for after twelve years in the grades and one year of college a student who cannot master the rudiments of English communication rather clearly does not have the verbal intelligence and hence probably the general intelligence for adequate college work. We make a point of this because colleges need indices other than grade-point averages in making decisions about who should remain as college citizens and who might better try their luck elsewhere. A second failure in the Fundamentals course should tell a dean or an advisor much.

A Course in Language and Communication

In the preceding paragraphs we have proposed (1) a clear-cut agreement with the high schools concerning the level of proficiency which they can reasonably be expected to help their precollege students attain; (2) a carefully constructed set of diagnostic tests which will enable the college to determine which entering freshmen have attained this level and which have not; and (3) a course entitled Fundamentals of Communication for those students who are inadequately trained. Now we propose an intensive course for all students who, either by the diagnostic examination or by the comprehensive examination given at the end of the Fundamentals course, have demonstrated that they are ready for college level work.

At this point it will be argued by a few that if a student has attained the level of proficiency which we have described as necessary for admission to the Language and Communication course there is no need for the course itself. Their argument will be that since the student has apparently already mastered the fundamentals of communication, he should no longer be "held up" but should be permitted to go on to other, and presumably more important, work. The fallacy in such reasoning is obvious. The student has not mastered the fundamentals of communication simply because he knows seventh-grade mechanics and tenth-grade expository organization. During his lifetime this student will be bombarded day in and day out by news stories, editorials and advertisements, broadcasts, lectures and sermons and reviews, street-corner harangues and dinner-table monologues, and a hundred other types of written and spoken discourse. Some of these will be sincere, some inept, some searching, some deliberately misleading. Can anyone seriously hold that the student is prepared for this bombardment because he knows a comma when he sees it or because he can write an expository paragaph? The fundamentals of college level communication include not only secondary-school mechanics but also such highly essential matters as the intellectual and emotional techniques of argument, the studied processes of criticism, the "pulls" of advertising and of propaganda, and a knowledge of the far-reaching relations between words and thoughts, words and things, words and human behavior and development. Since the latter subjects are not ones which the college can reasonably expect the high schools to handle, the college itself must be prepared to present them in a coherent and stimulating manner. It can do no less than establish an intensive required course in communication if it sincerely proposes to provide all of its students with an education which can really be of use in everyday life.

What we are about to describe is a course that, so far as we know, is not being given at the present time. Yet every aspect of it has been tried, tested, and under the proper circumstances found successful. Our process, therefore, is an eclectic one. Out of the brightest tiles of many courses, we have tried to create a mosaic which will have meaning and usefulness.

Skills versus Content

We are proposing that this course be a content as well as a skills course. In this, we differ with many who think that skills cannot be taught successfully so long as the instructor feels he is also responsible for imparting a body of knowledge. There is much to be said for this point of view. Combinations of composition and literature such as the one proposed recently by a committee of the College English Association have not proved generally successful. The difficulty in this wedding of skill and content is that the two do not stimulate each other. A reading of Chaucer and Shakespeare only indirectly aids the student in his own writing and that only over a long period of time; and certainly his own writing does not motivate him to read more of Chaucer and Shakespeare. Besides, for both student and instructor Shakespeare becomes so infinitely more interesting that by common consent the two decide to let practice in the skills slide. Whenever a paper *is* assigned, it is usually a critical commentary upon the poem or play just read, a commentary which will be criticized and graded by the instructor primarily for content. Only when the student has an astonishingly conscientious teacher is he likely to get anything amounting to the proper attention to the regulated and diversified practice in skills which he needs so badly. All of this, we suspect, will be even more true of those weddings of skills and social sciences which we have been reading about in the last few months, for here the two problems are even more remotely related.

We do not think that linking skills with literature or with the social sciences will do the trick. On the other hand, we cannot become excited about draining the skills course of all content. This means that the student must forage for his own topic each time he prepares a discourse. Sometimes, he may be helped by a book of essays supplemented by a class discussion, but in the final analysis he must pull the topical rabbit out of his intellectual hat. This, in turn, and to change the metaphor, impales the instructor neatly upon the horns of a dilemma. Either he must criticize the discourse as though it has no content at all (thus giving the student the vitiating impression that there is no relation between form and content) or he must set himself up as an authority upon whatever the student chooses to write about (thus making himself many times the fool). One moment he must make sage observations about a theme on the United Nations charter, the next about one on the cross-fertilization of sweetpeas.

The problem comes down to this: can a body of content be found which will be useful not only for its own sake but also for its capacity to motivate students toward greater proficiency in communication? We think it can, and we are proposing as content for this course the nature and history and operation of language. Here, in the first place, is a body of knowledge which no one can afford to by-pass who pretends to a general education. More than that, here is a reservoir for reading assignments and for theme and speech topics which have pertinence to a skills course and on which the instructor with integrity may pose as an authority. As the student reads, writes, speaks, and listens, he learns more about the symbols he employs; and as he learns more about the symbols he will be motivated to use them more skillfully.

Points of Departure

The possibilities for the content of such a course are so numerous that the main problem is one in exclusion rather than inclusion. Indeed, linguistic and semantics enthusiasts will have to be chained down to keep them from being too soon with too much. Definitely this is not the course for making subtle distinctions between Middle English dialects or between the positions of Korzybski and I. A. Richards. What is wanted is a fairly elementary treatment of those aspects of language which have a direct bearing upon the student's own communication problems. It would seem sensible, therefore, to start with the student's own language and to work out from there. Let us suggest three points of departure: the form of words, the usage of words, and the meaning of words.

1. *The form of words.* Most students take their verbal symbols for granted – as though they had appeared as they now are on the day of creation and had been saved from the deluge like the animals by being led two by two into the ark. A dip into morphology, therefore, is a completely new and, for most students, a provocative experience. The first step is to examine

a few of the words the student uses constantly: their sounds and spelling and the relation between the two; their stems, prefixes and suffixes; their inflections; the characteristics which suggest their function in the English sentence; their origin and their various shifts in form to the present day. Such a consideration will lead easily into the second step: a consideration of the history of our language, its origin, mutations, borrowings, and the present formal differences between British and American English. This, in turn, should lead naturally into a third step: a consideration of the development of language in general, its relation to the growth of primitive people to more sophisticated stages. Of necessity, this view so far as class time is concerned must be a rapid and fairly elementary one, but the individual student will have ample opportunity in his reading and writing and speaking to investigate and to report on more detailed phases of the subject. An explanation, for example, of how words are currently coined can be just as "practical" as one on how to build a rabbit hutch – and infinitely more pertinent to a course in communication.

2. *The usage of words.* Once the student begins to take notice of the form of words, he is ready to investigate how these forms are used. Again he might start with his own language. First, for example, he might try to analyze the differences among the words he employs at home, in class, in church, in the corner drugstore, and, if a veteran, in the army. What will become apparent, of course, is that his language is not the same in all these circumstances, and that whereas he may be able to communicate fluently in some condi-

tions he is well-nigh inarticulate in others. (Incidentally, this is one aspect of communication that college teachers too often overlook. They like to generalize about how poor their students are in writing and speaking, whereas what they really mean is that the students are inept in formal communication. Take these teachers out of *their* natural habitat and put them into the students', and see who fumbles more with his words!) Thus would the levels of diction become apparent and the way open for a discussion of the differences among what we call standard English, colloquial, and vulgate. Out of this could grow a consideration of euphemisms, localisms, archaisms, neologisms, and jargon and cant of all kinds. Again there is a rich field for investigation on the part of the student. Especially, he should be encouraged to analyze the language used by men in the profession which he intends ultimately to follow. What is the difference between the language of the leaders and that of those who are merely the workhorses? Does the profession have a special terminology? Is the terminology generally understood? When does it become jargon? The answers to these questions and a number of others will lead the student far along the road to a realization that a communication course is not only an essential course in general education but is in a very large sense a vocational course as well. Once the student realizes with Fries that good English usage is indispensable to leadership in any profession or important business enterprise, the problems of motivation will largely disappear.

3. *The meaning of words.* The relation between symbols and meaning is by all odds the most important

of the three considerations which we mention. Here, we would suggest that the work might start by an examination of the most common source of meanings, the dictionary. How are dictionaries compiled? What data are used? What are the sources for these data? What is the function of the dictionary? And what are its limitations? Once these questions are answered, the student can begin to get at some of the more complex aspects of meaning. What is the relation between thinking and communicating? Can we think without words? Can words exactly communicate our experiences and our ideas? What words come closest to doing so? Here though we think it profoundly necessary to discuss varying levels of abstraction and hence varying degrees of exactness in communication, we are not suggesting that the course be turned into one in general semantics. Especially we should think it desirable to avoid the terminology of the general semanticists which too often drives their prose into the very obfuscation they deprecate. Nor do we think it necessary to become evangelical. Sanity, we think, can be achieved by pleasant, simple people who have never heard of the semantics pledge to abstain from all verbal potions not 99-44/100 per cent referentially pure. But we do believe that the student should see how abstractions like "communism" and "fascism" betray us, how we confuse the word with the thing, how we substitute connotation for meaning. He should observe this in his local newspapers and in his favorite magazines; he should see how it operates in national and international politics, and, most important, he should be trained to observe it in himself — all of this to the end that he will be more critical of what he hears and reads and more restrained in what he writes and speaks. The possibilities for practical assignments are infinite. Let him explain why the demagogue is often successful; let him evaluate the language of his Congressman, his college president, or his fraternity windbag; let him explode whatever buncombe he can find in the editorial or advertising columns of his favorite newspaper, let him argue briefly about freedom of the press or any other such issue but make him direct his attention primarily to the problems of definition and evidence as against pious platitudes. It might even be salutary if occasionally the student consciously imitates the demagogue and propagandist so that he will be more sharply aware of their trickery and more keenly sensitive to their basic immorality.

The Sources for Study

Here, then, is a body of content that is organically related to the development of verbal skills and out of which practice in the skills can be made natural and interesting. It seems unnecessary to dwell on the details of how listening and reading, speaking and writing should be handled. Weekly or semiweekly problems in exposition, argument, and criticism can be assigned just as they always have been with the exception that subject matter will no longer be wispy material pulled out of the vast void of the universe but will be specific data found within the rightful field of this course. The development of the skills – still the major aim of the course – should be more rapid and certainly more enjoyable.

We should recommend that there be a library set aside for the students of this course where they can find on open shelves books relating to language and its behavior. Members of various departments should be responsible for assembling this material – English, speech, psychology, sociology, anthropology, anatomy, law, and the like – so that the collection will not reflect only the habits of a particular group. There will undoubtedly be certain administrators and librarians so myopic that they will see such a library as only a "luxury," but it is to be hoped that they can be quickly won over by persons with better vision. Actually a library for students in communication is no more a luxury than a laboratory for those in chemistry or a gymnasium for those in physical education.

We should not want to imply, however, that we think all of the student's study should be in the library. If this course is to be given the immediacy of appeal that it must possess, the student should be required to gather material for many of his speeches and themes from the life about him. We should suggest, therefore, that many assignments require him to study and report on the communication habits of such persons as his younger brother, his minister, his economics professor, and the corner policeman. He should examine for the same purposes the common public channels of communication: the newspaper, magazine, radio, and motion picture. Already, schools like Minnesota, Drake, Chicago, and Iowa are experimenting with procedures of this sort, and in many cases with heartening results. What a mockery is a first-year course in English that completely ignores those types of communication which bombard the student day in and day out and will continue to do so until he dies! One wonders what the teachers of such courses think they are doing.

Working Principles

In handling the students in the Language and Communication course, we should think that the same principles might operate that we suggested for those in the Fundamentals course: integration and adaptation to individual needs. We have already suggested how content and practice in the skills might be correlated. The skills themselves could be integrated just as they are in the Fundamentals course. Certainly it is even more important in this course that communication be seen as a unified problem and that the program not break down into separate courses in speaking, writing, and reading. Furthermore, though the students in this course should be somewhat more homogeneous (since presumably they have all passed the proficiency test before being admitted), there would be no reason why they should not be sectioned according to their persisting weaknesses so that more practice could be afforded, for example, in writing to those who are weakest in writing. Neither should there be any reason why a student in the Language and Communication course should not go to the various clinics for special advice in sharpening his techniques. Already it has been demonstrated that even the moderately good reader can increase his speed appreciably without loss of comprehension. Finally, the course can be adapted to the needs and interests of the individual student by making available to him the publication facilities of the college for a course magazine, the college radio for a weekly course program, the college theater for documentary films and student participation in "living newspapers," the college auditorium for a series of lectures or round-table discussions which could subsequently be reported on and discussed by students in the Communication classes. With imagination and the cooperation of the various agencies of the college, the Communication course can be made a stimulating program which though unified in its broad purposes and procedures is yet adaptable enough to help the individual.

The Instructor

Here, we should like to pause a moment to reflect on certain practices which have been common in most college first-year English programs. For the most part, such programs have been a means by which advanced study has been subsidized. Candidates for the master's and doctor's degrees have been required to serve a kind of unsupervised apprenticeship in the composition classes where they hurry through lectures and papers in order to get at their own dissertations and the material necessary for their own examinations. Naturally enough, their attitude is that the composition classes are something to be done, a kind of pedagogical purgatory where they languish until through the divine grace of a Ph.D. they are admitted to the paradise of literature and elective classes. No practice could be unfairer to the graduate students or to the freshmen. Largely, this is a device of shortsighted administrators who want cheap teaching and do not much care about its quality.

We should recommend in the strongest terms possible, therefore, that graduate assistants be employed in the Communication courses to do nothing other than to aid in the clinics. Those assigned to teach classes in this area should be at least full-time instructors whose main interest for the duration of the school year is teaching. If a man does not have his Ph.D. let him take a year off from time to time until he gets it. Actually, it has been proved many times over that such a procedure moves the graduate student along faster and returns him more money.

But simply requiring full-time teachers does not answer all the questions. Are there any inducements in the area for an enterprising teacher other than that eventually opportunity will open up in specialized courses because the Shakespeare man is nearing retirement or the history of the theater man has a bad heart? Must communication teachers through no desire of their own continue to be nothing but genteel vultures? We think that this need not be so. As we have outlined it, the course in the first place has far more intellectual challenge to it than the ordinary freshman English program. The effect of the traditional course is centrifugal: everything goes out from the teacher and nothing comes in. But a course involving content of the type we have described is bound to enrich the instructor as well as the student. Furthermore it offers a large field for competent research, publication, and hence reputation as a scholar. Beyond this we should advocate a specific college policy to the effect that good teaching and scholarship in this area be recognized just as they are in any other – with possibly somewhat more emphasis on the teaching than is ordinarily the case. Given a communication staff of any size, it would seem desirable that there be on it members of every instructional rank from instructor up to full professor.

The staff, in turn, must devote itself in full measure to the specific problems which confront it. There should be a special training course for new instructors which will take them over the material already known to older members of the staff. There should be regular weekly meetings of the entire staff in which the content of the course and the techniques of teaching are discussed. There should be regular drills for the entire staff on theme and speech rating in order to increase the individual rater's reliability. There should be at least one meeting a semester set aside for a discussion of standards and objectives. There should be an integrated research program aimed at more vital content, better teaching, and simpler and more accurate testing. Experimentation of all kinds should be encouraged so long as the ends are worthy ones, the instruction not jeopardized, and the students not converted from human beings into "case studies."

Senior Check-up

We have a final proposal to make in this chapter. It is all very well to have a minimum standard of proficiency, a battery of diagnostic tests, a Fundamentals course for the inept, and a Language and Communication course for all students, but unless measures are taken to enforce a carry-over of the skills into other courses and other experiences much will soon be lost. College faculties are constantly bewailing the fact that the students may know something about grammar in

English classes but they certainly do not show it in chemistry or economics or history. Where is the fault? Largely with the instructors in chemistry, economics, and history. A student will write or speak just as poorly as an instructor will allow him to. If teachers in other courses demand nothing in the way of English, they will get nothing. Our proposal, therefore, is that the college as a college agree (1) that students must communicate in standard English in *all* classes and (2) that they must submit to a general test at the beginning of their senior year in order that the college faculty may ascertain whether or not they can still communicate with college level proficiency.

Let us repeat: the chief reason for the lack of carry-over of proficiency in communication is the indifference of faculty members outside the skills courses. So long as students receive A's and B's for term papers bordering on illiteracy, no carry-over may be expected. The typical explanation of instructors who grade in this fashion is that they are interested in content, not style; thereby they imply that accurate and adequate communication can take place without attention to the symbols of communication. To see how weird this position is, transfer it to the field of numbers. By analogy the student in mathematics may presumably communicate in mathematics with only the sloppiest attention to the figures which he uses. If a seven is called for, that is fine; but if he prefers to use a three, that is fine too! In all classes what should happen is that instructors grade down papers and reports for shoddy English on the quite defensible theory that the content cannot be precise until the phrasing of the content is so. In addition to grading down, instructors in other classes should have the authority to send a student to the writing clinic for more practice should it develop even after he has passed the Language and Communication course that his English needs attention.

But if a college faculty is really serious about wanting its graduates to be articulate and to be intelligent listeners and readers, it should demand that the seniors as well as the freshmen demonstrate their skill. Numerous tests have indicated that seniors have far less verbal dexterity than freshmen just out of their first-year English course. This is largely because few students have actually tried to maintain standard English procedure once dismissed from the required freshman course. Accurate reading and writing are good clean fun for the first year, but after that they are not particularly necessary! Nothing will tend so much to dissipate this attitude in a student as the knowledge that at the beginning of the senior year he must pass a skills test comparable, in difficulty at least, to the one taken at the end of the Language and Communication course. For administrative simplicity this test might be limited to writing and to whatever can be tested briefly and accurately by an objective test or two. To make it seem more elegant, if that is necessary, it could be called a senior essay, but it should be written in class without the aid of freshman fraternity brothers. A senior whose proficiency has declined markedly should be sent back to the writing clinic and should be scheduled for another examination at the beginning of his last semester. If he fails this and possibly a third test just before graduation, he should not graduate. No college seriously interested in general education will allow him to graduate.

There should be no wincing at the fact that a communication program of the kind we have just described will be more expensive to operate than the traditional freshman English course. Sections must be kept small, certainly no larger than twenty; clinics must be supplied with enough tutors to handle the students who attend them; the library should be well stocked with books on language and communication; and every conceivable auditory and visual device must be used which proves of value in raising student proficiency. Furthermore, men carrying academic authority must be included in the staff, not only from the English and speech departments but, wherever possible, from other relevant disciplines also. This should be a college course – it is too big a task for even the English and speech departments combined, and the college faculty should accept responsibility for it.

We have put the case for language and communication as strongly as possible because we feel certain that the objectives of our program in education are largely beyond the grasp of those students who cannot listen and read with intelligence and speak and write with clarity. Good will, sincerity, and even intellectual acumen are admirable qualities, but they are not sufficient for leadership in a world so addlepated as ours. Evil men find words and because of this they find followers. Men of good will can afford to do no less.

4. The Natural Sciences

THE STUDY OF ANY ONE OF THE SCIENCES OF physics, chemistry, geology, mathematics, astronomy, biology, and psychology, with which this chapter deals, can of course contribute toward most of the objectives of general education. The habit of writing and speaking with clarity, conciseness, and accuracy; the use of symbols to promote ease of thought and economy of time; and the presentation of information by means of digarams, charts, and graphs are the natural results of a well-taught science course and contribute toward effective communication. Valuable lessons can be gained from science which promote maturity of judgment and good citizenship. The scientist is of necessity compelled to admit that widely divergent viewpoints may be equally valid and contribute toward understanding; he is prepared for change but combines the best of the old with the new. Few scientists would allow their judgment of a piece of research to be influenced by the nationality or race of the author. Science, if not moral in a religious sense, is eminently ethical. Truth and honesty are prerequisites; pettiness and deceit are incompatible with it.

The importance of the philosophy of science cannot be overstressed. An open inquiring mind, the effort to sift truth and fact from dogma and prejudice are particularly necessary in dealing with the problems of a turbulent post-war world. Even though the factors involved are so complex and our knowledge of them so meagre that these social and political problems cannot be solved by the application of quantitative and predictive laws as in the strict sciences, nevertheless the "scientific method" is applicable. The broader techniques of scientific research, care in analysis of results, the use of controls, complete lack of bias, absolute sincerity, and self-criticism are always pertinent. In a study of the natural sciences the student meets these techniques in almost pure form.

Objectives of Instruction in the Natural Sciences

The above benefits of instruction in science are, however, indirect and intangible. They will result from it naturally when the more direct, if not more important, goals are attained. A clear understanding of these goals and their importance is imperative if we are to fashion a worth-while science curriculum in the general education program. Certain objectives are peculiar to the sciences; they are either obtainable only through the study of science or are obtainable from it in a particularly straightforward and clear-cut manner. It is with these immediate objectives that we are here primarily concerned.

Physical and mental health are more necessary today than ever before as bulwarks against the eroding effects of the tempo of modern life. Tension, haste, worry, confusion, poor nutrition all find victims in the poor of health and the unstable of mind. A knowledge of the elementary fundamental principles and facts of living cells, metabolism and other physiological processes, bacteriology and epidemic disease, and scientific psychology cannot automatically transform every individual into a perfect physical and psychical specimen. It can, however, serve to convince a person that there are better solutions for physical and mental ills than the highly publicized nostrums of the quacks. It should be possible to get the student to see for himself that removal of an inflamed appendix may be more effective than an adjustment of a subluxation of the seventh dorsal vertebra; that dextrose, "the energy food" may possibly lack certain other highly essential food elements; that proper psychiatric treatment may help more than the doctrines of the Ancient and Mystical Order of Melchizedek. It should also be possible to get the student to see that it is easier to fight illness with preventive medicine and healthy living habits before it occurs than to treat it afterward. The occasional outbursts even today against vaccination, and the high percentage of physical and mental rejections among draftees during the war serve to point the necessity for education of this type. The success of public educational programs in the battle against cancer, venereal disease, and poliomyelitis gives encouragement that even more may be done on the college level.

The impact of modern science in promoting the material progress of man has been tremendous. Good or bad, ours is a society centered in technology. The common people in the civilized countries have attained (except for the ravages of war) a standard of living not only never before attained but never before attainable. However, the cornucopia of modern technology is not an unmixed blessing. Along with it science has created increasingly difficult social and political problems. An abundance of cheap atomic energy that may eventually bring more goods and more leisure to everyone may also bring more war and atomic bombs. The problems of national and international control of atomic energy, dramatic, sudden, and popular, are by no means the only problems introduced by modern science; others must also be solved. Depressions are more complex and disastrous in a highly specialized technological society; enterprises such as the telephone system may tend toward natural monopolies for technical reasons, but they must be controlled; easy and rapid transportation can also introduce epidemics of animal and human disease and crop pests. An understanding of science is necessary if it is to be completely utilized to increase the comforts and conveniences of life. A person is influenced in innumerable ways in his daily life by the products of science which surround him and if he is to derive maximum benefit from them he must have some understanding of their basic principles. An understanding of science is likewise necessary if the problems arising from this material progress are to be intelligently met. It is the task of the social sciences to train the student to meet these social and political problems, but it is the business of the physical sciences to provide the background of conditioning principles and facts. One cannot control a thing about which he knows nothing.

Finally there is the higher use of scientific knowledge, the cultivation of intellectual curiosity and creative imagination, the use of critical judgment, the development of a sense of satisfaction in successful mental activity, and freedom from fear and superstition. "You shall know the truth, and the truth shall make you free." Emerson believed that the motive of science should be an "extension of man, on all sides, into nature, till his hands should touch the stars, his eyes see through the earth, his ears understand the language of beast and bird, and the sense of the wind; and, through his sympathy, heaven and earth should talk to him." This cannot be accomplished by superficially exposing the student to a multitude of scientific facts. Some of these facts and the underlying principles must be made a part of the student's own being; the scientific method must be his own method.

Granted these objectives of science study in general education, how can we best accomplish them? Should the student be obliged to take a survey course in all the sciences or should he take core courses in some of them, or a combination of some, or should he be free to choose a standard course in one science? How much can the average college student assimilate? Should the science courses carry laboratory periods? How many, if any, hours of science study should be required? Should material be descriptive or analytic?

An examination of the objectives will show that they divide the sciences naturally into the biological sciences including psychology and the physical sciences plus mathematics. True there are common goals; nevertheless there is an essential body of knowledge in each of the two areas that cannot be substituted for the other. We submit that because of the fundamental importance of each area the student must be introduced to both.

We do not believe that the objectives of science study in general education are best met by survey courses covering a large area in a limited time. These are too likely to be courses about science rather than courses in science. They are apt to be dogmatic rather than inherently convincing. The student is likely to be taught a great many dramatic contemporary results of science rather than underlying principles and fundamental facts. If a survey course is to be completely outmoded in a few years by new advances, one cannot blame the student for failure to appreciate the basic fundamental truths; science is indeed to him a casual, ephemeral thing. This is not to imply that no advantage should be taken of new applications of science or recent discoveries to stimulate interest and secure motivation; however the cake should not be all frosting. It is usually less confusing and far more satisfying actually to learn and understand the principles behind a group of phenomena and how they bring these phenomena into being than to learn and attempt to remember a large number of superficial facts about the phenomena.

On the other hand, the separate specialized departmental courses in science are hardly adequate to achieve the objectives set forth above. Often designed primarily for the pre-major, they usually attempt to impart a maximum content in the specialized branch with no attention to application in other science areas and in the nonscience areas. The science courses that we desire must be directed toward the general objectives rather than designed around the specialized content of a given branch, and tests should be designed to reveal the effectiveness of the course in achieving these objectives. A student taught a great many facts about one or two trees cannot be expected thereby to be at home in the forest. Some attempt at integration of learning must be made.

We suggest therefore that one course be organized in the biological sciences and two in the physical sciences, one covering chemistry and geology, the other mathematics, astronomy and physics. Each of the three courses would be for a full year. The division of the physical sciences is simply a matter of convenience; the results of the study of chemistry can be readily applied to the study of geology and, particularly, some knowledge of mathematics is desirable in the study of physics. The student would be required to take the course in the biological sciences and one of the two courses in the physical sciences, preferably in the freshman and sophomore years.

General Suggestions on Science Courses

Some general suggestions as to organization of the course, choice of material, and method of teaching can be made that will apply to all three courses.

We suggest that the organization and general management of each of the science courses be made the responsibility of one individual. A course which consists solely of a series of lectures from a large cross section of the faculty is too likely to be poorly integrated and confusing to the student. Gaining no comprehensive understanding of the field as a whole, the class often takes objection to the parade of ever different faces talking on ever different and unrelated subjects. From time to time prominent faculty members may be brought in to lecture in their fields, but the class should have available a single individual for guidance through the course as a whole. The class should be small, preferably fifteen or twenty students, certainly not over thirty, and a large portion of the class time should be reserved for general discussion. With proper direction the student can read a text outside class just as well as he can listen to an impersonal, standardized lecture during class. Under this plan class meetings can serve to much better advantage in clearing up individual questions, in personalizing the course.

The question of laboratory work is a difficult one. Certainly the laboratory offers the opportunity of participation by the student, and if properly conducted, it can stimulate interest and appreciation. Since the strength of modern science lies in checking theory against experiment, it is desirable that the student should experience this process. However laboratory work is also time consuming, and time is limited. It has been shown during the war that good demonstration experiments can accomplish most, if not all, of the ends of laboratory work in an elementary course. We recommend that in lieu of laboratory work an adequate number of good demonstration experiments be given with the course.

What are the attributes of a "good" demonstration experiment? The experiment must be simple. It must demonstrate some fundamental principle in a clear, direct manner with simple apparatus. The student must not be confused or distracted by complicated auxiliary equipment. The course of the experiment must be easy to follow by the whole class. If the apparatus is large it can be seen directly from throughout the class room; if not, it may be possible to project the experiment on a screen, to pass the exhibit around the class, or have the class gather around two or three sets of duplicate equipment. Contrary to the opinions of some educators, we believe that the experiment must work, and must give positive, indisputable results. There is little value in an experiment in which the results are so hazy that arguments or long explanations from the instructor are necessary to convince the student that something has been accomplished. The maximum possible student participation should be secured. Sometimes this may be done directly by choosing students to assist in the experiment. The class should feel free to suggest changes or additions. A class which follows a demonstration experiment closely, with interest and understanding, which objects on occasion to methods of procedure or asks for repetitions is truly participating in the experiment. Finally the class must have the necessary background to understand the experimental work before it is performed. Research today is almost always directed toward some definite end. Real progress is made when a theory has been developed and new results of this theory are checked experimentally. Although it is true that some of the great discoveries were made accidentally, they were usually made by men who already had the training and ability to see that something unusual was taking place. The student with little or no experience will derive maximum benefit from an experiment if he is prepared beforehand, knows what to expect and what to look for.

As an example of a good demonstration experiment, we may cite the exhibition of atmospheric pressure by means of the Magdeburg hemispheres. The equipment is simple, two hollow hemispheres of metal and a vacuum pump; if the latter is merely a hand-operated pump, so much the better. The experiment is quick and conclusive. After exhausting most of the air from the hemispheres, two members of the class may be invited to attempt to pull them apart. Incidentally if the boys really try to pull the hemispheres apart rather than merely give a token tug, class participation is probably high.

A further possibility in relation to laboratories is to provide the student with opportunity for individual work, if he desires. In this case laboratories with equipment and facilities for experimentation and with instructors available for consultation would be open. The student would be made welcome to perform experiments for himself even though this work would not be required, nor would credit be given. This privilege need not be restricted to members of specific classes, but might be open to any individual genuinely interested in learning.

Material for the course must be highly selective. In the limited time available it is impossible to cover an entire field exhaustively. Concern over what is included in the course will produce more results than worry over what has been omitted. That important fundamental principles be stressed is essential. As we have said before the course must be organized around the objectives rather than around the science, with emphasis on those topics which contribute most toward the general education and general living of the student. For example, the discovery of Klebs of diphtheria bacilli in 1883 was undoubtedly a great discovery with tremendous benefit to mankind; however, its effects are hardly as far reaching as the discovery by Pasteur in 1861 that microorganisms originate from living parent microorganisms rather than by spontaneous generation. The disproof of spontaneous generation can be made the basis of a very good demonstration experiment; the applications of the principle in control of epidemic disease and infection are almost limitless.

The reference to Pasteur's work naturally brings up the subject of the use of historical material. Properly used, this can be a highly interesting and stimulating experience for the student. The material should be pertinent, however. It should illustrate principles that are still valid and useful today. Perhaps the work has been modified in some details or extended by later developments, but it should not have been completely superseded, unless, of course, the purpose of introducing it is to show how science corrects long-established fallacies. The Ptolemaic system may be of great historical interest, but as a scientific theory it is a great failure. Memorizing the date of a great discovery is of little value in showing the effect of the discovery on the daily living of the individual.

The treatment of material in any one of the three science courses must naturally be descriptive, but not at the expense of being analytic. The question immediately arises as to how far it is possible to go with the average beginning college student. We can expect him to have had training in arithmetic and elementary algebra, and to have forgotten the training with amazing thoroughness. He will probably have had a course in geometry and in general science, most of which he will likewise have forgotten. In view of this vague background practically no common prerequisite can be assumed among those who enroll for courses in college science. On the other hand, these courses must also be suitable for the occasional student who has had high school trigonometry, physics, chemistry, or biology and has not forgotten most of his training. To meet these extremes is a difficult but not impossible task. At the college level considerably greater rigor in development of subject matter is possible. Because of the greater maturity of the student much can be done to develop appreciation of the scientific method, to stress principles rather than facts, to cultivate broad philosophical insight, and to secure transfer of intellectual activity to other areas. The student can be taught to reason for himself. The instructor should strive constantly to achieve the cultural aims of general education.

Since these will be required courses, the utmost effort must be put forth to make them interesting, to capture the imagination of the student who thinks he does not like science or cannot understand it. Science must be made natural and living rather than an esoteric lore. Many aids to higher motivation are available: motion pictures and other visual aids, demonstration experiments, historical anecdotes, current topics, field trips, student projects, etc. These are to be used with the end in mind that the student will learn science as an important, enjoyable subject closely connected with his daily life and not as a candy-coated pill, pleasant to take unless one digs beneath the surface.

Subject Matter of Science Courses

As to subject matter for the three science courses the following suggestions are not meant to be exhaustive, nor do we claim that they are the best possible choice. However, we offer them in the hope that they may prove of some value as a basis in the organization of such courses.

The course in the biological sciences should stress those things of importance in the personal and public life of the student. There is little excuse for time spent on classification into kingdom, phylum, class, order, family, genus, species, and so on. The course might first consider the unit of life, the cell, and cell metabolism, then multicellular organisms and more complex forms of life, always treating living matter as a dynamic system. The major portion of the course should be given to a study of man himself and his problems, with emphasis on reproduction, nutrition, development, heredity, organic evolution, and man's mental processes.

Modern scientific psychology has produced a vast body of knowledge about man and his adjustment to the world in which he lives. Some of these facts are essential in the professional activities of the psychologist, the psychiatrist, the physician, or the personnel officer but they are of little value to the average citizen. Much of the detailed information about the nervous system, the sense organs, glands, and other specialized knowledge often included in an elementary course in psychology can be played down in the psychological unit of the biological science course. Other material such as that relating to intelligence in individual and social adjustment, memory, the emotional development of the individual, the influence of propaganda on individual and social behavior, and the growth of personality should be emphasized. It is not important that the average citizen should be able to name the bones of the inner ear or locate the pineal gland, but it is highly important that he understand the psychological forces which play upon and shape human personality, that produce a normal, mentally healthy human being capable of living a full and rich life, or which create a mentally sick, frustrated, neurotic, and ineffective personality who is a burden to himself and a problem to his associates. Especially significant are the scientific facts of social psychology which undermine claims of racial, nationalistic, or group superiority and which reveal the basic similarity of all human beings. The psychological unit in the biological science course should also inculcate the habits of looking at human individual and social problems with the detached judgment and the inquiring mind of the scientist. This objective of such a course if reached will be exceedingly rewarding to the future citizen in a world in which people of all races, creeds, and colors are to be thrown into sudden and intimate contact.

The biological science course should also contain a unit on personal and public health which would acquaint the student with matters of personal hygiene and sanitation. Ignorance of these basic biological facts makes impossible a life of individual well-being or intelligent social action in the improvement of the public health. Much of this instruction should be a responsibility of the student health service.

The courses in the physical sciences should also be pertinent to the student's life. The chemistry-geology course might start with the concept of elements and their union to form myriads of chemical compounds. A consideration of the law of definite proportions and its implications will lead naturally to the building blocks of matter, atoms and molecules. The system of the elements with atoms of one, two, three electrons becomes simple. Valence, inorganic compounds, and acids, bases, and salts may be considered. The energy of chemical reactions, ionization and solution, and states of matter may be included. The importance of the inorganic chemical manufacturing industry in daily life may be developed. The law of mass action is involved. Next the elements of organic chemistry, the chemistry of foods, synthetics, and plastics may be studied. Polymerization is important. Applications of all these to other areas, both scientific and nonscientific are numberless. Catalysts and photochemical reactions are important in the biological sciences as well as in chemistry. The development of synthetics may serve to equalize the economic resources of countries. "Better things for better living through chemistry" is more than just a slogan.

From the study of the raw materials of the chemical industry and their distribution the student's interest may be led into a study of geology. He may learn to understand something of the processes through which substances are concentrated in various parts of the earth and the implications of the constancy of atomic weights. He will learn the effects of erosion, wind, rivers, and ice, and will find interest in the earth's interior, volcanos, earthquakes, sinking and rising land masses. A study of the geological time eras and the progress of life as read in them, the forces which molded them, will give him a better framework within which to build his picture of present-day life.

The mathematics, astronomy, physics course might well begin with a study of the properties of numbers. All the students may be expected to be fairly proficient in the manipulations of arithmetic, but few of them will have any idea of the underlying principles, that, for example $a + (-b) = a - b$ is not immediately obvious or axiomatic, but is a derived property of numbers from the usual definitions for addition and subtraction. Operations with numbers suggest the rules and definitions of alegbra: algebra becomes the immediate and obvious extension of arithmetic. The study of simple algebraic equations should continue to stress the underlying principles. A surprising number of students do not comprehend that transposition is but an abbreviated form of the definition of addition. The introduction of variables and functions offers further opportunity to stress the philosophy of the subject rather than the external facts. Most students seem to feel that a function which can be expressed algebraically or trigonometrically is somehow more real or genuine than one which must be defined indirectly.

Class interest can be maintained by the occasional introduction of mathematical puzzles and paradoxes. Mathematical induction as a method of proof can be made extremely absorbing. The principle of this powerful method can be readily applied outside the realm of mathematics. Logarithms and the use of the slide rule may be presented as intriguing, timesaving devices. The theory of progressions finds immediate application in compound interest and annuities. The elements of statistics can be enlivened by application to everyday situations. The transition from algebra to analytic geometry is easy, and a comparison of the methods of analytic geometry with those of descriptive geometry is most illuminating. If an insight into the methods of each is gained, the number of exercises covered is not important. The elements of trigonometry may be illustrated in surveying, astronomy, and navigation. That the latter is by no means a closed subject, witness the whole new Loran system of hyperbolic navigation developed during the war.

The subject of astronomy should be much more than a mere cataloguing of the constellations. The earth as an astronomical body, the solar system, the galaxy of solar systems, and other galaxies beyond these cannot fail to arouse the student if enthusiastically presented. Our knowledge of the composition and other physical characteristics of distant stars through a study of their spectra is a great achievement. Theories on the origin of the solar system illustrate the boundless imagination of man.

In physics man's imagination turns to the other extreme, the atomic theory of matter, atoms composed of electrons, protons, and neutrons. Drifting streams of electrons as electric currents work for man in numberless ways. The modern concept of energy becomes the unifying principle. The elements of mechanics are easy to illustrate from the pupil's own experiences. Heat is again but another form of energy. Sound brings in the concept of wave motion, which is again used in electromagnetic radiation, and once again in the newer ideas on matter. The harnessing of energy directly from the nucleus of the atom is a fitting climax to the effort to understand and control energy. The physics of the atmosphere, the study of the earth's air conditioning mechanism is a subject close to the daily experience of the individual.

In conclusion we quote from the "Report of the Special Committee of the National Association of State Universities to Study Postwar Educational Problems."

> Liberal education properly defined calls for the latest and best knowledge concerning the nature of the physical world and man's place in the biological scheme of things. This knowledge comes chiefly through the physical and the biological sciences. If these sciences are to be an integral part of general education, however, they must be something more than an introduction to vocational and specialized training. They should provide the student not only with the knowledge of the principles, data, and phenomena of a particular science, such as physics, chemistry, geology, zoology, or botany, but they should also provide him with a knowledge of scientific method and some understanding of the role that science, all science, has played, is playing, and seems destined to play in the modern world.

5. The Social Sciences

It is a trite saying that mankind has come an amazing distance in wrestling with Nature to provide for his material wants while at the same time the problems of living and human interrelationships have mounted in intensity. Conflict among individuals and nations leading to chaotic breakdowns, loss of wealth and life, seem to be characteristic of the so-called civilized world. Depression and war are the two events which weigh most heavily in the mind of the average citizen as he contemplates the dilemma of contemporary society. Clearly, any approach to general education through social science must inquire into the forces which bring about such a dilemma. If a more stable and livable system of human relationships is to develop — if living is to become less chaotic — a foundation must exist upon which human affairs may be better ordered. In order to appreciate and comprehend the factors which have contributed, and are contributing to the feeling that society is almost permanently unhinged, the contemporary world must be looked at in its social, political, and economic setting. Is human intelligence able to cope with and control the various social factors influencing the modern world? This indeed is a burning question of the century.

There are those who insist that all is hopeless; that man has built a material world in which he does not know how to live in any kind of peace or security with his fellow men. These are our same fellow citizens who label as impractical starry-eyed dreamers those who grasp for perspective and understanding of human affairs by seeking causal factors and their relationships in the whole process of social, political, and economic development. These critics are the pessimists who shake off war and depression by merely pointing out that society has always been cursed by them in the past – a convenient way of saying, in effect, that nothing can be done by way of dealing with a state of disorganization in society. Should this become the prevalent attitude among so-called intelligent and useful citizens of the present, the perplexing and baffling problems posed to those seriously concerned with education could be simplified. The path would be clear for general education. The syllabus in the hands of the student could read: "Get all the material goods you can for rich living. Bide your time and take things as they are. Do not be concerned with your fellow man because the forces of social disorganization are bound to get you in any event – it has always happened thus and always will." This would perhaps be a welcome and workable philosophy for some, since it would justify almost any selfish individual action, but it could scarcely be associated with any intelligent approach to a useful life.

To convince students that society need not give way to fate and circumstance, that intelligence can be applied to the reshaping of man's relationships, is an ambition that cannot be completely realized. The social sciences are not mature, nor are the students who enroll for courses in this area. The key to all human and social misunderstanding is not to be found in the disciplines of this field of knowledge. Progress is imperative at this moment in the world's history, however, and we maintain that study in social science is essential to that progress. The interaction of economic, social, and political factors underlying the contemporary world must be made clear to those who look to general education as a means to better living through understanding.

Social Change

One of the most important results which a course in the social sciences could achieve is to train students to look at problems of the modern world in terms of readjustment brought about by change in the social, political, and economic aspects of life. Despite the warnings of some college commencement orators that the tried is always true and that change is suspect because it questions the past, persons of college age are distinctly aware of change. On the whole they are unafraid of it — as a matter of fact sometimes fear they have become too accustomed to it. Still, after graduation, many of these same students judge problems of a social, political, or economic nature almost solely on the basis of whether they constitute a change in the accepted way of the daily noncollege society of which graduates have become a part. What is meant here is not merely a plea for awareness of change nor a worship of change in and of itself. The fundamental point is that society must constantly readjust to change and that problems of the present must be seen in a world which is in one stage of a long process of evolution.

Disorganization, then, instead of being viewed as the sin of a particular political party, or as evidence that the virtues of the past have all been tossed overboard by the younger generation, comes to be seen as an accompaniment of change. Recognition of change, its significance to human relationships, and knowledge of the basic underlying causes bringing about the change can serve to cushion the resultant disorganization — disorganization which could conceivably lead to confusion and open conflict in the absence of such knowledge.

As an example of the need for recognition of social change and the necessary readjustment which it brings about, reference may be made to the expansion of technology and culture of the western world. This expansion has brought about changing conditions of life in all parts of the world and has made clear a basic fundamental trend toward world economy. The Industrial Revolution opened the way for an expansion of production the like of which had not been experienced. Man and his newly-found partner, the machine, joined in a process of expanding production and markets which reached through the channels of international trade to raise the scale of living for millions. Value was created in raw materials as they were exchanged for manufactured goods; capital flowed to nations for development of productive resources. The nations of the world moved in a dynamic economic environment down through the nineteenth century — an environment which changed conditions of life and broke with the past traditions of self-sufficient states. Wars of the twentieth century shattered this pattern of international relations, but nations of the world had geared their economies in such a manner as to emphasize interdependence as a break from independence of the past. War or peace, the deep down grinding of science and technology reached farther and farther across the map of the world so that economic forces were constantly breaking through the restraints of political and geographic boundaries. Improvements in transportation and communication were annihilating distance — the world, rather than the city, state, or nation, was becoming the economic unit with which mankind had to deal. In terms of efficient use of resources, both natural and human, self-sufficiency was already outmoded as an intelligent way of life prior to World War II. Still science and technology kept pressing until in the last days of World War II the atomic bomb convinced mankind that national existence independent of others was impossible — science had outmoded a former pattern of human relationships.

Impact of Science and Technology

As has been pointed out in the treatment of the area of science in this volume, the world of today is a world of science and technology. This is not to say that man has become a machine nor that he lives by science alone. It is to say, however, that the deep underlying factor in what is viewed by many as the crisis of modern civilization is the impact of science and technology upon relations among men and nations. The cry goes up all over the world today, "Why is it that science cannot be harnessed for the good of mankind?" Science and technology will undoubtedly continue to grind in the direction of discoveries which are capable of improving the material welfare of mankind. The full realization of the fruits of an expanding technology, however, in a world already drawn close together through the annihilation of distance, requires cooperation among the nations of the world. This cooperation is, of course, difficult to attain since the cultures which guide man and nations have developed in a period when economic and political institutions were different. Nations in a former era were accustomed to pursuing what they considered to be independent national policies in dealing with political and economic affairs. Economic maladjustment within a nation, it was thought, could be remedied without concern for external ramifications. "Let us put our own house in order and let the rest of the world go by" was an expression of an abiding faith in independent national action. The truth of the statement that the welfare of one nation is related to the welfare of all nations, although being demonstrated through the actual unfolding of events, is achieving recognition only with difficulty. Common understandings, then, are difficult because of social and cultural conflicts, but certain it is that the "rules of the game" as it was formerly played need modification. An older pattern of human relationships must give way to a world-wide view.

The field of human relations has been beset with many new problems arising from the changes brought about by scientific discovery and technological development. These are problems which call for new social adjustment – problems which cannot be solved by merely applying former patterns of behavior. As science demonstrated the application of intelligence to the harnessing and understanding of Nature, so must social science point the way to analyzing and understanding society. A scientific attitude of mind toward society must prevail when social adjustments become necessary in a scientific world. Ample illustrations exist, however, in our own country to show that human attitudes do not keep pace with the changes brought about by science and technology. That this "cultural lag" may become less acute is in itself a laudable objective for a social science course in a program of general education.

The discussion thus far has been directed toward the need for intelligent and understanding consideration of the problems of human relationships as they exist today. If the obstacles which mankind must overcome before a more stable pattern of living can be worked out are not insurmountable, we must turn attention to consideration of college training in the social sciences.

Suggestions for a Social Science Course

The proposals and suggestions which follow are designed to show the essential place of economics, sociology, and political science in a program of general education. The limitation to these three fields we realize at the outset is bound to be questioned but we hasten to point out our justification for such limitation on the following grounds: First, the clear-cut recognition that time and resources are limited in terms of the over-all program proposed for general education. In the second place, it is assumed that no course in social science built around these three fields can fail to stress the points at which geography, anthropology, and psychology impinge upon the consideration of social problems. This should by no means be interpreted as relegating other social sciences to the sidelines – it is rather a sincere and frank belief that in the time available for most students in general education, students who will not become majors in social sciences, contemporary problems of most vital concern may best be approached through economics, sociology, and political science.

Principles and Concepts

What is proposed is a single course in social sciences which attempts to bring together and integrate the basic principles or concepts of these three disciplines. The words "principles or concepts" should not be interpreted to mean that the course will become one whose emphasis upon pure abstraction and mental gymnastics is so great as to be completely removed from reality. Too much teaching has tended in the direction of theoretical emphasis, as if it were a sign of weakness to deal with the social problems uppermost in the minds of students as they approach their first courses in social science. Again we must emphasize that the primary purpose of such a course is not to impress the student with the dignity of the field of social sciences – we are not thinking of training experts. What is really intended is a balanced approach between the two extremes of all theory on one hand and "problem" discussion on the other. Certainly sufficient attention should be devoted to the all important problem of showing the student that he may learn to analyze social problems through economics, sociology, and political science by understanding their basic principles and concepts in much the same objective manner that the chemist, physicist, and biologist approach the problems within their respective areas. He must learn as his first lesson that prejudice, emotion, and traditional attitudes are not trusted tools of analysis. This is an extremely difficult lesson to teach and equally difficult to learn in an unstable society; in fact, it is entirely possible for overzealous defenders of the "scientific approach" to go to the extreme in stressing objectivity at the expense of eventually coming to grips with the application of principles. The presentation of this first lesson must be handled with care lest the student interpret it in the light of a defense of the social sciences against all other areas of human knowledge.

In the student's attempt to understand what are basic principles and concepts, it certainly is to be expected that he soon realize the differences in approach and objectives of the three fields under his consideration. Only if he is aware of the varied nature of social problems can he be on guard against ready-made snap judgments and hasty conclusions made from only one vantage point in social science. He should see that with all social sciences dealing with man in his social relations their subject matter is obviously interrelated and that his knowledge of this interconnection early in his work will depend much upon his understanding of the contribution of each of the three fields to principles and concepts basic and common to them all.

Economics is concerned with the activities of human beings as they endeavor to satisfy never-ending wants by utilizing scarce means provided by nature. This naturally leads to a concern with organization and operation of business, markets, prices – the process by which mankind wrests from nature those goods and services for the satisfaction of human wants. To comprehend this process, however, the student must take into account the institutions through which it operates and the organization of society which develops in the search for the most efficient and satisfactory operation of the process. He will see that these institutions are themselves conditioned by other institutions or aspects of the general social process, such as forms of government, educational organization, and the whole mode of life of a people.

Political science is concerned fundamentally with describing the political process, the needs and functions of government, the organization and administration of governmental machinery by means of which conditions are established under which human beings may associate and work. Here again, the student should observe that a concern with the political process must of necessity be related to the operation of other processes at work in the society. Numerous factors affect the life and character of government. The rapid development of science and technology, bringing such changes as they have in the economic way of life, have also brought changes in the concept of the role of government in modern society. Witness the questioning of the appropriate functions of government in our own country today as implied in the oft repeated statement: "There ought to be more business in government and less government in business." Clearly an important objective in the political science approach to a social science course should be emphasis upon the function and ends of government in human society and the manner in which those functions and ends are conditioned by the general social process.

Sociology as a study serves to describe the general social process, the steps by which one social condition moves into another, the process by which social life goes on. Its aims, like those of the other social sciences, is to provide a basis for understanding of social problems. The subject matter of this discipline is concerned on the one hand with matters relating to group life and the social heritage, and on the other with the development of human beings as members of society. One of the most important points that the student should observe at the outset is that the human being is a product of his culture and that culture and social life are products of the activities and desires of human beings. The culture of one generation becomes the social heritage of the next and certainly the student should learn early in the course that one aim of the sociological approach is to understand the social heritage as a product of human activity and as an influence upon subsequent behavior and relations. As the work of the economist and political scientist is related to the general social process, so must the sociologist in his concern with human nature and social organization recognize the influence of economic and political organization on the whole pattern of human behavior.

The basic principles and concepts of economics, political science, and sociology must be introduced in such a manner as to emphasize the integration of the three methods of inquiry into the understanding of social problems. Care must be taken to guard against overemphasis of their scientific nature while at the same time the student should learn the futility of dealing with specific problems before he makes some analysis of the principles and factors underlying such problems. Discussion of social problems serves to focus attention on their significance in the modern world and may be justified on the ground that it shows the sincere concern of the individual with the welfare of the whole. It is our firm conviction, however, that discussion based on a background of principles and understanding will lead to wiser solutions.

Principles and Problems

One important problem associated with an integrated course in social science presents itself in the form of a question raised by most teachers of introductory subjects in the fields under consideration. "How far shall we go in presentation and analysis of principles and how far shall we go in the consideration of problems?" The criticism that many courses in social science do not come to grips with "real problems," unfortunately has a certain amount of truth in it. There is no clear-cut answer which we care to defend as the ideal way of solving the dilemma. In many colleges the solution takes the form of a sharp break in a year course with the first half being devoted to "theory" or principles, and the second half to "problems." Several widely used texts in economics for example are so divided into "principles" and "problems." Courses in sociology, perhaps too often, are slanted entirely toward a survey of pressing social problems without concern for the understanding of social processes in all their action and interaction. In the same way political science suffers from the problem approach when attention is devoted primarily to following the course of debate or pattern of political party alignment on pieces of controversial legislation.

On the other hand there is little reliable evidence that principles must be taught separately and distinctly from problems. In economics, for example, a discussion of the basic principles underlying foreign investment would appear exceedingly dry and inconclusive if the student were not shown how such principles applied to the international economic policy of the United States in a world of readjustment following war. Planned direction of such a discussion would at least provide the student with basic principles upon which he could more intelligently appraise the problem of isolationism in the modern world. Numerous other examples may be drawn in which basic principles could well be used as the springboard for intelligent appraisal of current social problems. The relationship of principles of wage payments to the conflict between labor and capital, large-scale business organization and the problem of concentration of wealth and control of markets, taxation and inequality in distribution of income, the business cycle and unemployment, banking and the control of credit, public debt and financing of war – any or all of these could well constitute a transition between principles and problems.

In the explanation of basic essentials in sociology, discussion may be centered on the biological basis of human life – the biological facts which are necessary in the study of social life. Such discussion could easily lead to a consideration of the attempt to interpret human affairs on the basis of racial terms, the assumption that races differ in innate capacity – the doctrine of biological determinism. At that point one of the most troublesome problems of contemporary society, racial discrimination, could then be examined in such a manner as to show the necessity for a more intelligent approach to the facts of racial difference as they influence and are influenced by social reality. The widespread attempt upon the part of certain groups to escape responsibility for miserable social conditions by attributing them to biological traits presents another opportunity for weaving principle and problems in the same cloth. The oft repeated statement that certain classes are poor because they are happier that way, or because of native incapacity, can be analyzed in such a manner as to create in the mind of the student a strong desire to look below and beyond rather than accepting the easy way out by saying, "'That is Nature." Population, the community, competition, social institutions, accommodation, social control, are among other examples of presenting concrete material from the problems of the contemporary world while focusing attention on basic principles.

In the study of political science a transition from basic concepts and principles to problems would be as desirable and fruitful as in economics and sociology. Certainly in a basic approach to political science description of the growth and development of governmental organization would be fundamental. This description would inevitably lead to a comparison of various forms of government and serve to develop in the mind of the student an understanding and appreciation of political processes on a broad scale. Such understanding would tend to promote a balanced judgment in respect to institutions by which other peoples live. An analysis of the concept of sovereignty and its meaning in the whole development of political thought presents another example of the opportunity for dealing with the relationship between basic concepts and modern problems. This analysis could be treated in such a manner as to call attention to the pressing problems of government on an international level. In stressing the function of government in the whole social process emphasis might, for example, turn to the promotion of general welfare as an important purpose of government. The consideration of this basic function would provide ample opportunity for the student to inquire into the role of government in alleviating misery brought on by the depression phase of a business cycle. Thus the student can observe that government is a part of the whole cultural pattern and, while emphasis should be aimed in the direction of the student's grasp of this point, he should not fail to see that the field of political science is abundant with material which breathes of contemporary problems. Care must be exercised to prevent the student from becoming involved in the machinery and techniques of government at the expense of failing to see the real goal and end of the political process.

The examples given above also suggest what might be done if a clear-cut division were made between principles and problems in the teaching of social sciences. Such division would call for an analysis of principles in all fields with merely sufficient material to suggest their application to problems, with the reservation of the latter half of the course for a head-on attack on a fairly wide range of specific problems from the contemporary world. This technique can be used with advantage to show how a given problem would be approached from the point of view of the economist, the political scientist, and the sociologist. A few examples may suggest the possibilities in the use of this technique.

The economist's approach to the problem of international investment mentioned above would revolve around a discussion of the much confused favorable balance of trade doctrine. Discussion would be designed to make clear the difference between balance of trade and balance of payments, the interrelationship of all international economic transactions in which a trading nation participates. The student would be shown how a nation's policy in respect to exports and imports must be adjusted to its international financial position. The way would then be open for a detailed consideration of the international economic policy of the United States in the post-war world. It will be noted that a discussion of favorable balance of trade doctrine at this point presents an opportunity to refer briefly to the significance and development of mercantilistic thought – one of the many points at which the social science course may make cross-reference to the history course proposed in this volume. The discussion of this same problem of international investment from the point of view of political science might start with the significance of international investment in the development of world trade, moving next into a consideration of some of the frictions among governments in the past as a result of expanding imperialism. The discussion could finally arrive at a consideration of the delicate and complicated international relationships with which future foreign investment must deal in the reconstruction of some pattern of world economy. A consideration of such relationships would confront the student with the issue of free or governmentally controlled movements of international capital in the future and set the stage for dealing with proposals for international cooperation in respect to such matters. Various angles to this same problem could be taken to illustrate the approach of the sociologist. It could be shown, for example, that the opposition of a large segment of the population to a less restricted policy of international economic cooperation may be explained on the basis of human attitudes, fear and hatred of foreigners for example. Or the discussion could very well turn to the failure of human beings to realize that changes in ways of living in the modern world necessitate changes away from a former standard of international relationships. Here also in the problem of international investments would be opportunity for a sociological discussion of competition and the manner in which it develops into conflict.

All current social problems lend themselves to the techniques suggested above. Poverty, for example, would lead to a discussion in economics of allocation of resources, natural and human, and would provide excellent outlet for an analysis of the lopsided pattern of distribution of income in the United States. The effects of poverty on human personality, delinquency, sectional conflicts within the society, are instances of sociological treatment of this problem. General welfare, governmental services to alleviate distress, effect on public revenue, highways, education, distribution of local political power— these would be fruitful outlets for discussion of political factors associated with the general problem. Racial discrimination would concern sociology in terms of a discussion of segregation, social restrictions, religious practices, and other aspects of human behavior. The effect of racial discrimination on employment and livelihood would be among the concerns of the economist. The political scientist would probably see in this problem an opportunity for discussion of political rights in a society where it is said that all men are free and equal before the law, even though some groups are effectively barred from the right to vote or to live in certain areas, or even to spend their money in markets where consumers are said to have freedom of choice.

Social Science and the Individual

The emphasis on interrelationships and integration in the treatment of social problems mentioned above may be judged acceptable in the sense that it stresses human affairs in the broad sense – in a social sense. A question may be raised, however, as to the possibility of the student receiving from this broad perspective anything which he can take unto himself for reflection in terms of his own individual personality and character. Social science is not moral philosophy, but it may be well at this point to consider the manner in which social science may be used to call attention to individual character traits.

Suppose that a class is studying the principles underlying commercial banking. The ordinary banking process in which loans and discounts give rise to deposits comes to be seen as a creation of purchasing power based upon a piece of commercial paper. The piece of paper is in itself a promise upon the part of a human being to return purchasing power which arises out of production. In short, a basic factor underlying the whole credit system is faith in the promises of the individual borrower. Illustrations could be made at this point to show that cooperation in the larger process of production and exchange would crumble in a society which failed to develop individual honesty. Discussions of poverty, charitable institutions, cooperation, treatment of minorities, standard of living, and other such topics certainly provide instances in which stress could be placed upon the importance of a strong sincere feeling upon the part of the individual for the welfare of his fellow man. In the treatment of the role of government in human affairs, emphasis upon honesty in the performance of government service and refusal to accept the proposition that government exists only as a mechanism for oppression of the weak by the strong, could lend emphasis to the importance of individual strength of character.

Scientific Attitude of Mind

It is hoped that enough has been said to indicate that the course in social science may be made to breathe the air of contemporary life without sacrificing too much the scientific approach to social problems. It should be repeated again and again that education in this area should strive to stress principles and the scientific attitude of mind sufficiently to convince the student that human behavior in the social world may be explained by the application of human intelligence in the same manner that Nature has been explained by the other sciences. If stability in human affairs is desired and is to be attained, thinking on social problems must rise above the level too often associated with well-meaning humanitarian discussion groups and student fireside discussions where preconceived notions, prejudice, and emotions hold the center of the stage. In the desire to develop this higher level of consideration in social science education care must be taken to avoid so much stress on method, research techniques, sharply defined tools of professional analysis, that the student becomes lost in a maze of terms and diagrams. Knowledge of certain basic tools and factual material used by the social scientist are essential, but above all it must be kept in mind that the purpose of such a course is to aid the student in understanding the world in which he lives and the human problems with which he must deal. Social science as such in general education should not be expected to train students to become bankers, social workers, members of the cabinet, professional reformers, labor leaders, or salesmen. It should be expected to aid students in becoming more useful and intelligent citizens in any walk of life.

We are proposing a course pointed in the direction of the suggestions made above for an integrated approach to economics, sociology, and political science as a complete year course for a minimum of five semester hours weekly. The course is not to be thought of as being divided into segments, a piece of this followed by a piece of something else, but rather a systematic laying of stone upon stone of all materials based upon a foundation of principles. It is hoped that the treatment throughout this chapter has shown the close interrelationship of the subject matter of the three fields and it is our belief that integration can be achieved in the presentation of material. As has been pointed out in the preceding pages, principles and problems may be interwoven with varying degrees of emphasis, but a presentation of principles and concepts in the three fields in the first half of the course followed by the problem approach in the second half is probably the more desirable arrangement.

Administration and Direction

The course should be directed by one person rather than jointly shared by a faculty member from each department, in which case integration and unity would be extremely difficult to achieve. In our opinion it is not necessary that the faculty be selected from all three departments. Members from any one of the departments concerned, if generally trained in the social sciences, could do the job. Educators may object at this point that an economist, for example, would not be sufficiently trained in sociology or political science to present adequately the approach of these two fields. If such is the case it only serves again to emphasize the dangers of overspecialized education at the higher level. This situation, of course, raises the whole problem of training teachers if the objectives of general education are to be achieved in the long run.

Undoubtedly, certain advantages would accrue in a course which developed a high degree of cooperation among the staffs of economics, sociology, and political science departments. If the head-on attack to the problem approach were the adopted technique, joint participation before the class of an economist, sociologist, and political scientist in the analysis of a given social problem could be made an effective manner of presentation.

The merits of the lecture versus discussion method is a problem for which there is no apparent solution at the moment. There is no concrete evidence to support a general statement that analytical material cannot be presented to large groups by the lecture method. It is being done effectively at certain institutions by men who seem to have a definite skill in that method of teaching. On the other hand, the student's interest and his participation in discussion of the problems which surround him would probably be better served in smaller groups. Suffice it to say on this subject that the sheer weight of numbers in relation to available personnel will be the deciding factor in dealing with this problem.

Course Materials

We hold no brief for a specified list of materials in the proposed course, although some general remarks seem pertinent at this juncture. Textbook materials in each of the three fields are available as well as texts which attempt a combined treatment. Both types may be used to advantage. In addition there is, of course, a vast accumulation of governmental publications which could be used profitably at various points in the course. Business journals, news magazines, publications of business research bureaus and foundations, journals of the professional social science organizations, so-called popular magazines and even a current best seller of fictional character — all these may be useful equipment in the study of human behavior. Discretion must be exercised in the selection from such varied sources in order to prevent bias and one-sided reading. The thought must always be kept in mind that quantity read is not nearly so important as how one thinks about what he reads.

Certain eyebrows will undoubtedly be lifted at the failure to deal thus far with the reading of "certain classics of political, economic, and social thought." Foundation treatises such as Plato and Aristotle certainly ought not to be neglected in general education nor should the social science course fail to call attention to Adam Smith and John Stuart Mill. On the other hand, keeping in mind the limits of time, it seems highly questionable to devote too much of the twentieth century student's time to reading of past societies when the objective of the course is to enable him to understand more clearly his own society. Obviously one cannot understand the present without some knowledge of the past, but in social science a great danger exists in creating so much reverence for classical statements of the past that students may fail to note that such statements came from a form of economic organization and system of markets which no longer exists. Social science was not stated once and for all by the "classic" masters and most certainly the work of twentieth century scholars deserves special attention. The emphasis on moral and religious philosophy as the approach to social sciences, the approach of the classics, is still existent as witnessed by the proposals for social science education in one of our old, respected, and influential universities. It is this worship of the past, simply because it is the past, that is one of the greatest stumbling blocks in analysis of social problems today. Social and economic values handed down from a past society with its own convenient arrangement of authority, class structure, and economic power are not necessarily values which men must accept today in a society whose organization is vastly different.

6. The Humanities

a. Philosophy and History

If we decide to learn something about what man has done since *Pithecanthropus erectus* lumbered down the jungle paths half a million years ago we may decide to study history, archaeology, or anthropology. To an apathetic universe the human destiny has no meaning, no consequence. But to the thinking descendants of the erect ape man, the tale of their race is important. What lies beyond the dark frontiers of time? Ignorance about man's past produces warped perspectives, though vacant minds may not know it. Some distortions can be removed and the present can be made more intelligible by studying history. So, too, if we wish to discover a part of what reflective men have thought in the past and think today we may study philosophy.

Thus, by pushing open the gateway to history and philosophy the wandering student can find many things. He can learn how man developed laws and customs; how he created things of beauty to warm his spirit against the chill blasts and the great night without; how, spurred by his restless desire to know, he created systems of religion, science, and philosophy that stand silently by the ages' inheritance of pain, cruelty, torture, and degradation; how his indefeasible desire to achieve has brought him to build monuments that he hopes are imperishable, but that he knows are not.

Such words as philosophy and history are merely conventional names once arbitrarily selected to describe certain parts of the sum total of our knowledge about the nature and behavior of man and the universe. For the sake of convenience historians have grouped the centuries in the time scale into divisions called ancient, medieval, and modern. As further instruments of description there have been created the political, economic, and social divisions of history. Where these divisions have proved cumbersome others have been added to describe particular aspects of the lives and actions of men. Likewise various "systems" and "schools" have arisen in philosophy.

Such neat human arrangements are purely arbitrary. Men are social, philosophical, political, economic, artistic, and intellectual beings all at the same time. Labels and titles are useful means of reference and description; in themselves they have no reality. However, it sometimes happens that words are confused with the things they describe. When that occurs, the words cease to be instruments and tools of convenient description. They become the masters of those who use them. "Error is never so difficult to be destroyed," says Jeremy Bentham, "as when it has its roots in language. Improper terms are the chains which bind men to unreasonable practices."

Thus the unity of life and knowledge has often been fragmented. High walls have surrounded the academic fields; within the walls are the garden plots of the specialists. So far as our concept of general education is concerned we use the words philosophy and history to describe the general content of two of the "several areas of human knowledge" as described in our statement of objectives.

Of what value, in terms of a general education, are philosophy and history? In the first place, they help the student to cultivate an intellectual curiosity and the habit of critical reflection; both are born of the wonder of man about his origin, his past, and his destiny. They will also aid in developing a desire to seek the valuable and the useful by means that are detached and unprejudiced. They will assist the student to be a good citizen; to maintain his mental health; to appreciate beauty and truth; to achieve a set of ethical concepts and moral values that will contribute to his emotional maturity. "The philosopher," said Plato, "is the spectator of all time and all experience." Whether or not it is fully agreed that "history is philosophy teaching by example" there remains the fact that the methods of both philosophy and history demand unusually gallant efforts to think clearly and make inevitable some kind of world view on the part of the students. Courses in these areas, wisely taught, will broaden the social intelligence, give some degree of validity to the convictions by which we live, and show the students why it is that the historian and philosopher are two guardians and interpreters of the cultural heritage of man.

Our social order requires the practice of certain ethics and principles. The ultimate effect of what is achieved, or not achieved, in the classroom is of immeasurable consequence so far as society is concerned, because every student goes forth to be a citizen. The teacher helps to determine whether that student will be a burglar or a missionary, the maladjusted enemy or the friend of his fellow men. Social vision and perspective are therefore prime requisites if an instructor is to be successful in terms of the objectives of general education. A good teacher, as in the days when teaching began, cannot help being interested in ethics, in social progress, religion, justice, beauty, freedom, physical nature, in all that man was, is, and may be.

The authors of a recent book about general education have noted that "indispensable as the good teacher may be, it by no means follows that what he teaches is irrelevant." Under the bracing influence of this concise observation we shall now attempt to explain, in the simplest possible way, how we think good teaching and satisfactory subject matter may be effectively conjoined in history and philosophy.

We propose that there be included in any program of general education one course in philosophy and one in history, each to run through a full academic year. What should be their nature? How may they be adequately given? Discussions of this problem have revealed that what was once a straight road has now become a labyrinth. A few years ago, for example, simple answers were found in survey history courses in which the history of the United States or of Europe was taught chapter by chapter, year by year, in the chronological fashion of an annual register. The recent tendency has been away from this simple approach. Often there has been an increase of specialized courses, dealing with limited aspects of a narrow time period, and frequently dictated by the particular interests and competence of the teachers. There is also the "topical" approach, the "sampling" approach, and the "problems" method. There are the offerings designed to stress the political, social, economic, military, diplomatic, or religious developments. Some pioneers, ranging more widely in search of satisfactory general education courses, have constructed new programs embracing the historical advance of western civilization in both America and Europe. The degree of success of all such plans clearly depends upon complex and manifold factors, especially the nature of content, of interpretation, of emphasis, of teaching competence.

We assume that the majority of students in general education courses will not become professional philosophers or historians. Indeed, they may never again be subject to formal instruction in those subjects. We are agreed that by a process of selection and emphasis the student should be taught more about evaluation and thought, and less about the dead facts regarding what happens to have happened. We are strongly of the opinion that unless the content of the courses is significantly related to the dominant problems of today it will have little meaning to the student as an individual and our stated objectives may not be achieved. What we have held to be ideas and traditions of high contemporary importance are therefore included and stressed.

Finally, we are agreed that an attempt to force or massage too much factual content into any course is full of hazard. The mania of wishing to teach more than students can learn should be ruthlessly suppressed. Before entering the classroom the instructor might well recall the wise comment of Bishop Berkeley: "We stir up a dust of words and complain that we cannot see." That the practice is widespread does not excuse its frequently deplorable results. The passion for "leaving out" as little as possible has often been responsible for the construction of strange courses in which the professors range like mavericks through wide areas of human knowledge. In our philosophy and history courses we propose to "leave out" a great deal. Many of our omissions are made with reluctance. However, had we included all the subject matter suggested to us then sound academic procedure would have required general education courses in philosophy and history extending through two or three years. Our final decisions have been based upon answers to this question: "Which of several procedures gives the best promise of attaining our objectives within the course period of one academic year?"

A concrete illustration may make this point clearer. Although we do not propose the following procedure in a general education program a good case can nevertheless be made for an introductory course in philosophy divided, let us say, into four groups of inquiries: (1) cosmological inquiries, regarding problems of the universe, space and time; the nature and origin of life; the philosophy of evolution; purpose in the universe; the nature of God; (2) ontological inquiries, such as the problems of mind, matter, materialism, idealism; (3) epistemological inquiries, such as the sources of knowledge (rationalism, empiricism, etc.); the validity of knowledge (realism and idealism); pragmatism, its theory of knowledge and truth; (4) moral and aesthetic values. A philosopher might wish to include sections on mechanism, vitalism, and naturalism; the nature of reality; causality; the nature of energy and matter; and so on. Another may be appalled to note that nothing has been said about the importance of formal instruction in logic.

All these facts we have recognized. There are, however, at least two other important considerations. The first is that the student has one academic year, no more, in which to submit to this general education course in philosophy. It may be that at his home in Wounded Knee, Montana, he had no opportunity to learn much about the technical language of the subject. We may assume that when he comes into the classroom whatever we tell him is news. The year now at his disposal could easily be spent in taking a single course in logic, in discussing a single philosophical system. But time is a commodity of general education. Secondly, there are certain civilizing aspects of philosophy more directly related to our objectives than others. For example, a student might profit from a quiet time spent with speculative theories and abstractions of the thirteenth century; but it might be better for him as an individual to discuss the social character of religion today.

Having agreed that these things were so, we took another step. We asked two further questions: "What are the major philosophical concepts that are now of most importance to Western man? If a student examines these concepts critically and learns how they developed and were interpreted through the centuries, is it probable that our objectives in general education will be achieved?"

With these questions in mind, we selected a number of philosophical concepts and problems important to our civilization. Many of these have been discussed by thinking men, young and old, for centuries. University and college students could be expected to have some desire to think and talk about them. It is always a sound pedagogical principle to move from the familiar to the unfamiliar. Here again, however, we found that our total selections bulked too massively. They included man's conception of God, beauty, justice, evil, good, nature, personality, political society, and so on. All of these are obviously of importance in 1947. The study of any of them can be justified in terms of our objectives. However, we agreed that most of these ideas need not be treated separately. In many cases, indeed, it would be impossible to do so.

Three Questions in Philosophy

We therefore decided to establish three major divisions in the philosophy course. In the first division, the professor and students would discuss the search of the philosophers through the centuries for an answer to the question: "What is the highest good, the *summum bonum*?" All men fashion their behavior in view of their goals. Somewhere there is surely an end that is final and justifies all our deeds. This is the end of all human conduct, the good. What did Plato have to say about the form of the good? Why did Aristotle conclude that the life of reason, the maintenance of order, is the end of human life and hence the highest good? What and why were changes brought by the Christian Church and Christian theology, culminating in the work of St. Thomas Aquinas? In what secret place did the philosophers seeking the Heavenly City of the eighteenth century believe the good to abide? In our present system of commercialism, industry, the mass production of automobiles and neuroses, do men agree about the highest good? If so, where may it be found?

Inevitably, as the student adventures on this quest, he will learn something about the ideas of justice, and he may agree with Plato. He will see unfolding the great traditions of the search for beauty from the Greeks to the Renaissance and after, though to a lesser extent after. He will certainly gain a deeper insight into the religious, moral, and ethical cores of great philosophical traditions after confronting Plato and Aristotle, Christ and St. Paul, St. Thomas Aquinas and David Hume, Luther and Locke, Hobbes and Hegel and Spencer, William James and John Dewey. The student's response to the forces he feels in his own time will be more sensitive because in his mind an increasing number of ideas, old and new, will be held in solution. In learning something about them he may incidentally and unconsciously have learned a bit about logic. It is hoped that all of this may be no sterile procedure. The children who have fallen from the righteousness of their fathers may find answers for themselves in a time that cries aloud for assurances, new or old.

It is therefore recommended that the first third of the academic year be spent in discussing the answers of men through the centuries to the single question: "What is the highest good?" It would be well, we think, to begin by exploring the answers to that question that might be given today. Then the answers of earlier centuries would stand forth in vivid contrast and stimulate the controlled discussions so necessary to education. We should also like to suggest that the number of lectures be kept at a minimum and the use of discussion groups, so far as is possible with existing pressure upon available staffs, be extended. So far as we are aware, no course of this kind has been given in any college or university. Hence no textbook has been written for it. It is therefore suggested that brief selections of illustrative passages from the great philosophers be prepared, possibly in mimeographed form, and used as guideposts and bases for discussion.

In the second division of the philosophy course we propose a study of this question: "What major ideas have been held during the past two thousand years about the relation of man to society and the state?" In this section the student might well begin by discussing the duties, rights, and responsibilities of an American citizen to his fellow men in a free society. Our democratic institutions, and their supporting philosophies, might then be usefully contrasted with other more state-centered systems of which we disapprove. When this has been done, the class should be able to turn to Plato's *Republic* with more understanding of what Plato was about. Indeed, the student can move more critically and intelligently in studying the ideas, values, and institutions that rise and fall throughout the past when he can relate them to his familiar present.

Where earlier ideologies, climates of opinion, and institutional arrangements cannot easily be related directly to modern America then careful attempts should be made to explain why men thought and acted as they did; why their institutions and the concepts upon which they were based ceased to have significance as, for example, when new waves of commerce, industry, invention, and nation-state development joined with cultural and religious forces to dissolve both political and economic feudalism and the universal Christian Church synonymous with Christendom. The emphasis, of course, should be on the emergent ideas of the seventeenth and eighteenth centuries, for it was then that the fountainheads of freedom began to flow in a steadier stream.

There are so many facts and patterns of relation discernible in the various ideas about man's place in society that it is clearly impossible to include them all. From Plato to John Dewey, however, there are certain dominant problems that men have been called upon to solve. At different periods in the time scale the forms of these problems changed. What conditions and assumptions generated the altering philosophical ideas about the place of man in society? What resources did the philosophers and men of action draw upon? Why did they make the choice they did? What are the relations of cause and consequence, means and end? It is by seeking answers to questions such as these that the sights of the student will be sharpened and not blinded. The process of discovery may beget some ideas, not only about philosophy, but about related inquiries such as history, the social and natural sciences, and art. We hold to the opinion that the creeping roots of the student's mind will be extended more swiftly by the Socratic method of probing questions than by even the most vehement assertions from the professor's platform. Moses is one of the few men who was educated by a thundering voice.

In the third and final division of the philosophy course we propose the study of a question suitable to a scientific age. "What have philosophers and scientists, past and present, had to say regarding man's place in the universe?" It would seem that man has conquered nature unless it should turn out that nature has conquered man. Throughout the modern period man has lifted up his eyes unto Nature. From the beginning human beings have increasingly implemented their naked hands and their understanding by finding new tools and new sources of power. Their successive achievements have created new civilizations, with new ways of life, new points of view, new mores.

It is of particular importance, we feel, that the students should be given an opportunity to do some guided thinking about man's place in the cosmos. Here, as before, it is desirable to begin with a study of what reputable philosophers and men of science have to say today about the nature of the universe, their philosophies of science, their concepts of God.

After the essential articles of the varying faiths of modern man have been explored, the student should examine the currents of change from the Greeks to the present day. How did the Greeks conceive of the universe, of the status of man in it, of God? The Romans? The Middle Ages? The men of the Renaissance? The age of Absolutism? How did God the Heavenly Father become God the Mathematician in the eighteenth century? What happened to the cult of reason in the conflicts of the nineteenth century? What of the alleged challenge of the theories of evolution and the defense of the ancient citadels of faith? Questions such as these, and to some no final answers can be given, will aid the student in reaching conclusions that are valid to him. Because this is so, he may look upon his world with less doubt and confusion; with more awareness of the problems of all men in the search for the good society; better prepared, surely, to apprehend and appreciate "all things that are of good repute."

Throughout this book we stress the need for a general semblance of understanding about the aims of human life and the ultimate goals of organized society. Complacency and indifference will certainly lead only to the destruction of the ramparts we presumably guard. To be intelligent about the present, our students must know something about the past. Of what should that "something about the past" consist? How can a course in history be devised to gain most effectively our objectives in general education?

History as Direction

History, in fact, provides no ready-made maxims of policy or conveniently apt analogies to aid the prophet or confound one's opponents in argument. It is, of course, often used to "prove" many things. Professor Charles A. Beard has recently prepared a list of twenty-one phrases that frequently appear in the speeches and writings of those who are not historians. They include: "All history proves"; "history makes it clear"; "history shows"; "history teaches"; "history repeats itself". But the omniscient historians know that while Clio may, to a limited extent, do some of these things on certain occasions, she seldom does them well.

The importance of history to the student is that it should make him realize that the present is the product of the past and is not understandable apart from it. From a study of the past, as suggested at the beginning of this chapter, the student can be persuaded to appreciate how it is that mankind has arrived at this particular spot in the time scale and why the ages' inheritance of values, so painfully acquired, really means something. The historian who does not gladly teach and explain this reason for the abiding power of history fails in his duty to society. It is a pity and a paradox that many historians today, whose proper business is in great waters, linger like lotus eaters, still within the narrow seas. Research, left to itself, will not effect much.

The reader has noted that we are most anxious to avoid the development of swiftly moving, superficial survey courses, so productive of manifest evils. It has been, and remains, quite undesirable to force the student, in Edith Wharton's phrase, into "the thick of thin things." On the other hand, it is almost equally regrettable if requirements are imposed that include specialized or highly technical courses early in the student's academic career. That is one of the reasons why we have departed from the loosely used, accepted, and established categories of course offerings to make our suggestions about general education programs.

Most students, including those who have attended schools where curricula are carefully designed, may not be expected to possess much knowledge of the European backgrounds of American civilization. A general education course in history, in terms of our objectives, should be designed to include the main sources of our historical heritage from Europe. It should also be constructed to provide some reasonably credible explanation of the development of contemporary events, manners, ideas, and institutions. How may this be done?

Again we have adopted a principle of selection as a controlling and directing factor. It is somewhat difficult to transport the new student swiftly back to the jungles of Java in the paleolithic age, or even to the palaces of the Medici. Without some basic training he will not understand where he is or what he should do about it. It is better, we think, to begin by selecting certain directional thrusts in the history of western civilization pointing toward the present day. This is an age of science, technology, invention, capitalism, finance, commerce, nationalism, democracy, imperialism, proletarian movements, and the search for collective security. All through recent centuries mankind has been moving unconsciously toward these ends.

It therefore seems first of all desirable to point out and to stress scientific progress in the growth of western civilization beginning, let us say, with the Renaissance; to trace the main technological achievements; to explain how an economic revolution not yet ended created a new world and new problems; to discuss the rise of nation states and the extension of the old disorder in Europe to the whole world. Much can also be done to illustrate continuity and change and relationship among occurrences by discussions of art, literature, and religion; by describing the rise of democracy and liberalism; by studying the way salient ideas have been embodied in present institutional forms.

Not all the essential aspects of our western civilization can be described solely in terms of the directional thrusts mentioned above. Nevertheless, if we attempt to construct a general education course in which these continuing drives are constantly kept before the student, the result will probably be more satisfactory than otherwise. For example, it is possible for a professional scholar to live, so to speak, in Tudor England; but often, though fortunately not always, the student in his classes cares nothing about Tudor England except in terms of a final grade for something "got up" on the eve of examination. However, if the teacher is able to show that there is a direct relation between movements or ideas in the sixteenth century and the modern world then the situation is improved.

A History Course: Structure and Method

The history course in general education might well be divided into two parts. The first might begin at the Renaissance, with particular emphasis upon science, art, economic pressures, exploration, literature, northern and southern humanism. There would follow a study of the Reformation, where the importance of the revolt of Luther and Calvin would be explained with reference to the economic and political background, particularly the rise of the middle class and the nation state. In discussing the importance for modern history of the process of national consolidation in England, Spain, and France considerable attention may usefully be given to a study of the factors making for national unity and the institutions that helped to maintain it. The study of "the dawn of a new era" might be continued by an examination of the economic changes of the sixteenth and seventeenth centuries, particularly the great shift of trading centers from the Mediterranean to the west and north; the increased urbanization of Europe; the rise of the great banking families; the mounting international commercial, maritime, and colonial rivalry, and so on.

The contribution of the seventeenth century may also be examined in the light of the great scientific achievements of that age; the contrast between the triumph of absolutism in France and of parliamentary government in England; and the importance of England's progress toward political freedom as the American colonies were being established. Against this background the student would be prepared to review in turn, perhaps with new points of view, the roots of American civilization, the American Revolution, and the foundation of the American governmental system. Here, for instance, it would be desirable to explain and to stress the importance of the English revolution, English democratic political theory, the prevailing ideas of reason, natural law, and fundamental rights in the years when the thirteen colonies were becoming independent states.

The first part of this course should finally attempt two tasks: to explain the rise of the English scientific, agrarian, and industrial revolutions and the world consequences of those events; to describe the French Revolution and the Napoleonic Era, where more stress would be placed upon the general importance of the events to Europe and America than upon the rivalry between Jacobins and Girondists, the early life of Napoleon Bonaparte, and the details of his military career. It seems to us, for example, that it is of more value to American students to understand the effect of the war of 1812 on American nationalism or the European background of the Monroe Doctrine than it is to know the reasons for Napoleon's miscalculations about the Russian winter.

The second part of the course might follow the pattern adopted in the first. Therefore, instead of a chronological study of the history of Europe and America from 1815 to 1947, we propose that the students continue to follow the dominant themes, movements, or thrusts in western civilization such as nationalism, democracy, capitalism, imperialism, proletarian movements, scientific advance, and the search for collective international security. Nationalism, for example, might be studied in terms of its manifestations in Europe and America by discussing and comparing German and Italian unification with the Civil War and reunion in the United States. In this respect our plan follows a system used successfully by Professor John T. Horton of the University of Buffalo in an experimental course given in the summer of 1946 at the State University of Iowa. Nationalism may also be discussed in connection with democratic and capitalistic developments in both Europe and America. European imperialism and American manifest destiny can be usefully compared. So too, can proletarian movements.

The latter section of the second part of the course will be concerned with two themes: the importance of recent scientific advance to western civilization in peace and war; the development of major international friction and the search for collective security. The importance, if not the results, of our scientific conquest of power is clear. With respect to the second theme, it seems to us that this should include, among other things, a survey of American foreign and domestic policy before the shift from neutrality in 1941; an examination of the various European attempts to find security between 1919 and 1939; the growth of political and economic ideologies opposed to democracy; Nazism, Fascism, and Communism; the rise of Russia as a world power; the Second World War; the general problems of peace, economic and political, considered with reference, for example, to the United Nations Organization; the Bretton Woods Conference; the International Bank; spheres of influence; export trade and foreign loans; and so on. Finally, considerable attention might well be given to the question of the future role of the United States in international affairs.

These, then, are the philosophy and history courses in general education that we propose. In writing about the problems of philosophy courses the authors of a recent book have remarked that "there are various ways of organizing the materials in a course in philosophy so that they will be suitable for the purposes of a general education, and it is probable that courses offered by different instructors would follow varying methods of approach." History is one of the many subjects of which that statement would be equally true. It is quite improbable that the reader will be in complete agreement with all of the statements in this chapter. Little in this world is perfect.

There is one significant question to be answered by men interested in general education. It is this: "What may the students be expected to carry away from the courses that have been devised?" A curriculum or course may be old and honored, beloved of faculty and administrative officers; but it may be very bad. In that case the interests of the students should surely come first. We often know too many of the right answers, too few of the right questions.

The important fact is that either the problems of general education are to be dealt with in the vertigo induced by impulsive opinions or some reasonably effective intellectual operations must precede intelligent action. G. K. Chesterton once remarked that it was bad enough to have lost one's way but it was worse to have lost one's address.

b. Literature

Literature is one aspect of man's search for pleasure and meaning in his own experience. Less systematic than some other aspects, it remains for many the most complete and the most satisfying. Like the other arts, it does not reason from experience but recreates experience, and in so doing it allows not only the mind of the reader to participate but his whole intellectual and emotional being. In this sense, it is distinct from the scientific, historical, and philosophical disciplines which are concerned primarily with the knowledge gained from experience rather than the experience itself. This is not to say that literature, music, and the plastic arts can supersede or be a substitute for these disciplines. Far from it. Modern society requires for its persistence the interpretations, classifications, and generalizations which these disciplines afford. But the point worth repeating is that in science, history, and philosophy, the procedure is away from the actuality of experience to the level of generalizations about it. Splendid matters of the intellect are distilled, but the individual is often lost sight of. Literature brings our attention back to people, with all their hopes and frustrations and little joys, their pettiness and their magnificence. And thus literature begets not only pleasure and understanding but also sympathy and affection and a compulsion for more sagacious living.

Literature, therefore, seems indispensable to a well-rounded program of general education. When rightly taught, it has within it the power to help the student achieve almost all of the objectives which we have set up for such a program: intellectual curiosity, emotional maturity, moral integrity, aesthetic sensitivity, and the desire and competence to be a useful citizen. But it does not follow that just any *course* in literature will suffice. Students can be immunized as easily as they can be sensitized. What is needed above all else is a course which will help the students enjoy good reading, enjoy it so much that they will be eager to continue reading after the course is over.

At this point someone will inevitably remark that the student already enjoys his mystery and adventure stories and that, if pleasure is the first end of good reading, why try to shift his habits? The answer must not be too glib although in this case it must necessarily be brief. Frankly, it is doubtful that we should try to change his habits – at least completely. The student of today is born into a world that is going at times to drain away every ounce of his nervous energy. There are going to be days when he needs nothing so much as relaxation. He cannot always go fishing or play golf. Are there only the movies left? Why should he not do as many of his college professors do – turn to lighter fiction? A college course might do worse than encourage the natural habit of reading for mental and emotional relaxation.

But obviously we do hope for reading that is more than just restful preoccupation, and to that extent we are interested in changing the student's habits. It is not that we are attempting to substitute work for pleasure, but a greater pleasure for a lesser one. What we covet for the student is the deep and compelling satisfaction to be gained from reading of a more thoughtful nature. This is not wholly an altruistic aim though any teacher worthy of his salt is selflessly concerned with the happiness of his students; bluntly it is also a matter of survival. The problems of what we have come to call the atomic age are too complex to be tackled by persons fed on slicks and pulps. We want students to enjoy great writing so that they will read it; we want them to read it so that they will become heirs of its rich wisdom and broad human sympathy. Otherwise, we are mightily afraid that they will be people without values or vision, and that they – and we – shall too soon perish.

What becomes readily apparent is that we cannot solve this problem simply and briefly by listing a few books for required reading. First and foremost we must decide upon an adequate approach. What will make good books exciting? What will help the students understand them? What will encourage students to read more? These and others like them are not new questions by any means; nor are the answers we give likely to be new. Nevertheless, there is some point, we believe, in going over what surely must be three components of any intelligent approach to a general course in literature. These are (1) the nature of the students in the course, (2) the theory of literature on which the course is based, and (3) the elements of courses already in operation which have proved valuable. Only after we have discussed these and drawn certain inferences from each shall we venture to suggest a specific course which we think might do the job.

The Nature of the Students

A general course in literature is, as we are using the term, a course required of all students. That should be kept in mind throughout this entire discussion. It is not a course directed at a minority of English specialists; it is a course directed at the great majority of students who are submitting to their last formal training in this field.

What do we know about these students? The most specific and hence the most useful answers to this question must be made by the individual staff after careful study of its student population. Here we can make only a few remarks about typical American students. For the most part, they come from middle-class homes where the reading is confined largely to the daily newspaper, a news magazine, *Life* and the *Reader's Digest,* and magazines of the *Saturday Evening Post* and *Cosmopolitan* class. Occasionally there are small home libraries composed largely of a dozen or two older books now no longer read, detective stories, and a few of the more widely advertised contemporary works, both fiction and nonfiction. The parents read little themselves, and few insist that their children do otherwise.

High school training varies with state and local requirements. In the main, there are two courses, a survey of English literature and a survey of American; one of these is usually required but seldom both. Faced with large classes, a heavy teaching load, a dreary assortment of extracurricular activities, and a student body which lacks even the selectivity of the freshman class in a state university, the high school English teacher may be pardoned if the high school course sags into one *about* literature instead of one *in* literature. It is doubtful that a college staff confronted with the same conditions would do appreciably better. But, whatever the cause, the fact remains that students coming to college by and large remember the irrelevant details (Byron had a club foot, Poe drank too much) and do not recall books as the source of stimulating experiences which they want to repeat.

The reading assigned in high school, the printed material about the home, an occasional book borrowed from the library, and the inevitable comic books, these are the sum and substance of the typical student's contacts with "literature" before he reaches the general course in college. He knows something about short stories, somewhat less about novels, very little about plays, and next to nothing about poetry. Reading is something he does when there is nothing else to do, and ordinarily there is something else to do. At Harvard, Chicago, Wellesley, Haverford, and other schools where the student body is carefully selected, the picture may be slightly better.

Recommendations

We could go on, but facts like these are known to almost everyone. What, briefly, do they suggest?

First, that the general course in literature must be geared somewhat lower than teachers accustomed to advanced work would probably like to have it;

Second, that progress in the course should be from the more to the less familiar;

Third, that students might well be sectioned according to ability, at least to the extent of occasionally assembling the especially competent ones for special discussions and for the assigning of supplementary reading, both intensive and extensive;

Fourth, that every possible effort should be made to capitalize upon the student's natural motivations. Thus, the course might well begin with short stories and novels, the type of literature he is most likely to enjoy, include several works of contemporary interest, and be flexible enough to permit the individual student to read several books that he especially wants to read.

Those who pride themselves on making courses stimulating by making them hard will immediately charge that we are proposing spoon-feeding. As subsequent recommendations will indicate, we are far from suggesting this. But even if we were, our procedure here would be on sounder psychological grounds than that of educators who think every baby can be weaned on anchovy paste. For every student challenged by too difficult material, ten are repelled. We seriously doubt that the pedagogue who equates the interests of the students with his own scholarly activities is the proper man for a general course; we doubt that he is nearly so interested in the student's growth as in his own. Furthermore, we question whether he has any clear notion of the basic function of a literature course for nonspecialists.

A Theory of Literature for a General Course

The besetting sin of many literature instructors is that they insist on teaching literature as though it were economics, philosophy, ethics, history, spiritualism, or anything under the sun except what it is. It is small wonder, then, that students too often find literature a weak substitute for what seems to be a surer discipline. There is no sense of uniqueness, no sense that literature has its rightful province just as history and science have theirs. In defense of the literature instructor, however, it should be pointed out that he has just about the hardest task in the college, and that his slips though regrettable are understandable. Literature, as we suggested in the opening of this chapter, is something almost unbelievably complex. As T. C. Pollock points out in his *The Nature of Literature,*[1] its purpose is to evoke in the mind of the reader a controlled experience. It can be, therefore, just as complex as actual experience – even more so since the additional element of language is present. Its effects cannot be localized into problems of the intellect alone or of the emotions alone or of the digestive tract alone. Nor is the totality of its effect within the capacity of language for expression. Indeed, its most potent force is in those private experiences of the individual reader which cannot be translated into the public medium of language. Faced with the necessity of communicating something that is partly uncommunicable, then, instructors of literature may be partly excused for hunting refuge among the systematized generalizations of other disciplines. But in doing so, they wrench literature out of its basic position and jam it into at least four other areas where for the purposes of a general course it does not rightly belong.

---

[1] Princeton: Princeton University Press, 1942.

Literature as History

In many cases, for instance, literature gets confused with history. Taught by literary historians, the literature course becomes a sequence of splendid assertions about dates, authorships, influences, and movements. Now, there is nothing particularly wrong with this approach per se; it becomes irrelevant and vitiating only when it is employed among students who still cannot read with intelligence and appreciation. It may be quite true, for example, that Whitman was influenced by George Sand, but what boots it if the student still cannot share Whitman's experience and insight in "Crossing Brooklyn Ferry"? What occurs is that, to borrow a figure from Mark Van Doren, the instructor so effectively employs a cushion of history or exposition between the student and literature that the two never really make contact.

Literature as Science

Literature is also confused with the sciences, both natural and social. This is noticeable, first of all, in the tendency of some teachers of literature to overclassify. Classification is possible in natural sciences because its elements are observable, describable, and, to a large degree predictable. Species fit into genera, genera into families, and so on. Once one has discovered the proper genus, he knows the basic characteristics of the species. The system is neat, efficient, useful. But when an analogous pattern is imposed upon literature, whose components are not wholly observable and describable, and certainly not predictable, the result is absurdity of the worst order. What usually happens is that literature is first divided into its types: poetry, drama, fiction, and the like. This initial process has some merit, indeed we shall attempt later to justify it on pedagogical grounds. But too often the operation once started keeps going. Poetry, for example, is divided into lyrical poetry, dramatic poetry, epic poetry, and narrative poetry; and lyric poems are divided according to form into such categories as the sonnet, ode, and elegy, and according to content into such categories as nature, death, mother, and gone-but-not-forgotten mistresses. No one, we submit, can really read works of literature when such horrendous labels are pasted all over them. The artistic product becomes only an illustration of a classification which has no valid existence.

Others confuse literature and science, particularly the social sciences, by falsely assuming that since literature deals with matters of psychology, economics, and sociology, it therefore must be evaluated according to the criteria of those disciplines. Thus the work of art becomes good or bad depending upon whether the artist is a Freudian or not, whether he is a Marxist or not, whether he is a Malthusian or not. No wonder students get the idea that literature has been created by amateurs! If one is looking for codified knowledge, of course the great writers of literature were amateurs. Any second-rate psychologist according to that test is superior to Shakespeare.

Worst of all, possibly, is the confusion which results from an attempt to identify the language of science with the language of literature. In scientific discourse, it is quite necessary that words be referential; it is the thing which the word represents which is important, rarely the word itself. In botany, the word "thallophyte" is important only as it suggests a plant within a specific phylum; in economics "capitalism" is communicative only as it is tied down by definition, context, or both. In recent years the general semanticists in particular have performed a useful service by reminding us that we use our words too loosely, that there is too wide a margin between the word and the thing which the word represents. A difficulty arises, however, when this preoccupation with referents, which is appropriate to scientific discourse, is transferred to literary discourse. In literature, the word as well as the thing which the word represents may be a stimulus. The sound of the word, its associations, its length and accent are often just as important as its referent. What, in the final analysis does one care about the referents in Poe's "Ulalume"? This is an extreme example, to be sure, but it illustrates the point. Words in literature in and of themselves evoke responses. But since this evocative quality of words is largely a matter which varies with the individual reader, it is likely to be glossed over in public discussion as though it were something of no importance — or, worse yet, to be castigated as something undesirable. This is a broad subject and deserves more attention than we can give it here. Our main contention, however, is a very simple one: literature is not a science in its content, method, or language; and especially in the general course it should not be forced to operate as one.

Literature as Ethics

Then, too, literature is often deliberately molded to fit ethical and philosophical precept. When this occurs, when literature becomes little more than a repository for special doctrine, it becomes didactic and, eventually, stultifying. This seems so obvious that it is almost an insult to the reader to repeat it. Yet we still have with us the philosophical and ethical sects which begin with assumptions about the nature of man and trim the required course to those assumptions. How else can we explain the recent prominence of writers like Aristotle and St. Augustine and St. Thomas Aquinas in freshman and sophomore literature programs? One staff we know of was forced to teach Plato's *Republic* because the administrator thought Plato's concepts of goodness indispensable. We would not oppose the reading of a work like the *Republic;* by all means it should be read – in the general philosophy course where the subject of good and evil can be approached from many angles. We do protest the doctrinaire approach which drags into the literature course many books which might more profitably be read elsewhere. It would be a strange student who failed to become conscious of ethical and philosophical values in literature, but it would be an even stranger one who became excited about literature once he developed the idea that it was only a cover-up for homiletics.

Literature as Logic

There can be doctrines of form just as susceptible to dogmatism. We have in mind especially the combination of literature and logic and a kind of applied aesthetics which has been developed by the so-called formal critics. Theirs is a special approach to literature in which the student dissects the individual work in order to discover the relation of the parts to the whole and to one another, and to account for the work's special effect in terms of these relations. At its best, this system is useful in that it imposes few criteria from other subject areas, it places emphasis on the formal elements so long neglected by the impressionists, and in general it makes possible a more precise discussion of literary works. But in practice, this interest in form has too often become a preoccupation with form. A new book becomes simply a new problem in intellectual analysis with the result that such matters as coloring, connotation, and social significance are forgotten in the limited ecstasy of mental gymnastics. What is additionally disturbing is that a preoccupation of this kind must almost of necessity nurture a philosophico-literary jargon which effectively cuts off students from talking about literature with anyone but their own classmates.

Literature as Focused Experience

In the preceding paragraphs we have tried to indicate some of the more or less undesirable results that come from trying to equate literature with the systematized disciplines. Let us repeat that we are not talking here about research or advanced courses; nor are we asserting that the relations between literature and history, literature and science, or literature and philosophy should be ignored in the general course. But we do protest against an approach to literature in the general course that makes it seem like history or seem like science or seem like philosophy.

The necessary question then becomes: what is an appropriate theory of literature upon which a general course can properly be based? There is a very brief answer to this. To repeat what we suggested before, literature is human experience translated into words which are so selected and focused that they evoke in the reader an analogous experience. This definition at the same time that it emphasizes literature's peculiar quality effectively constricts its province. It rules out all works, however significant, which do not *first of all* attempt to evoke an experience – an experience that is likely to be more moving and more meaningful than actuality since it has been given proportion and coherence by the author.

Unless the general course can demonstrate that literature offers almost unlimited opportunity through reading for pleasurable participation in all manner of human activity it has largely failed. Only by doing so will it indicate the true potentiality of literature and create in the student a lively and persisting desire to read.

Recommendations

Assuming that this is a proper theory, how can it be put into operation? Again we should like to make a series of recommendations.

First, that the class and the instructor attempt to discover together what aspects of the total reading experience are ordinarily susceptible of discussion and what aspects must ever transcend the possibilities of the language for expression. An awareness of the distinction between what can and cannot be shared is a provocative one which inevitably must broaden into an appreciation for the infinite richness of the experience gained from reading great literature.

Second, that those aspects of a piece of literature which are susceptible of discussion and which will enrich the student's enjoyment of the work as a work of art should be analyzed in as rigorous a manner as possible, on the tenable assumption that pleasure increases with understanding. In such analysis, the main objective should be to have the student realize in detail how the raw and inchoate stuff of human experience is given form and hence significance by the competent literary artist. To this end, the student should be required to consider and expound such formalizing elements in a given work as the criteria for the selection and arrangement of material (as determined partly by the nature of the material, partly by the nature of the literary type, partly by the author's purpose), the point of view (its relation to author and reader, its consistence, its particular advantages and limitations), and the language (its precision, suggestiveness, harmony, tempo, rhythm). He should be required to compare the work with inferior ones so that he may discover what transmutation occurs in the one that does not take place in the others. He should be required to compare the work with nonliterary treatments of the same material to see what the former attempts and does not attempt. He should be required to compare formulated experience within the work with actual experience so that he may discover to what degree the literary product is an "imitation of life" or a "criticism of life" and what special values lie in the imitation or the criticism. These, and others like them, are problems appropriate to an analysis of literature as literature, and have their rightful place in the general course.

Third, that there be sufficient time for careful but pleasurable reading. Hasty skimming cannot be prevented, but it should not be caused by the demands of the program. For this reason, we think it wise to spread out the required work in literature, particularly for the nonspecialists, over as long a period as is feasible.

Fourth, that the reading be confined to books which have as their *primary* purpose the communication of a total human experience, books which make their appeal not just to the intellect but to the emotions and attitudes as well. We do not recommend, therefore, that the literature course include such works as Plato's *Republic,* Thomas Aquinas's *On Being and Essence,* or John Stuart Mill's *On Liberty.*

Fifth, that though a sizable number of books may be assigned for reading, only a selected few be considered in the classroom. The primary function of class discussion should be to establish a pattern for the kind of reading which leads to broad understanding and lively appreciation. No such pattern can possibly be established if the instructor must race through a poem a day or a novel a week. Probably no more than four sizable works should be subjected to class analysis in any one term. But substantially more may be assigned with profit for outside reading.

Sixth, that there be a special library or reading room where all the books the students are likely to want to read for this course are easily accessible.

Seventh, that there be writing projects through which the students have an opportunity to become aware of the special nature of literature and of the magnificent capacities of great writers. Students of the fine arts maintain that understanding and appreciation are accelerated by work in the studio. An analogy suggests itself here that literature students might well experiment with simple poems, one-act plays, and short stories. The tangible results will in most cases be bad, but it has been demonstrated in advanced writing classes time and time again that the activity of authorship results in more perceptive reading, particularly if the results receive careful and intelligent criticism.

Typical Courses Now in Operation

The two most distinctive courses now in operation are the survey and types courses. We should like to mention briefly what seem to us to be the more striking advantages and disadvantages of each, and also to make a few comments about the masterpieces course, which, though a distinctive procedure in some respects, is not strictly speaking a third kind of course since it usually falls into one of the two patterns just mentioned.

The Survey

Traditionally, the survey involves a hurried glance at the great and near-great of the English literary tradition, though in some schools it has been shaken up enough to include a few American writers. Promoted by the literary historians who have dominated most English departments for the last half century, the survey is valuable in that it gives the students a brief acquaintance with a number of writers, develops historical perspective, and, when well taught, demonstrates the causal relation between changing social forces and literary production. Too often, however, the emphasis in this course moves away from literature toward history with all the undesirable results mentioned above. Names and dates become too important, periods and movements become too sharply defined, terms like "Romanticism" and "Neo-classicism" become labels which are far too glibly applied, and literature itself becomes something which exists often only in excerpt. Furthermore, the survey is too likely to encourage skimming instead of disciplined but enjoyable reading. On the whole, it is an unsatisfying kind of general course, and it is encouraging to notice that most schools are modifying it or abolishing it.

Two variants on the traditional survey should possibly be mentioned: the world literature course and the humanities course. The type of world literature course which is designed to survey as many of the Western authors as the staff can cram in seems to compound all the disadvantages of the English survey without adding any appreciable advantage. Undoubtedly the world literature course which does not limit itself severely to a relatively few works (as most of them fortunately now do) is the worst course possible in this field. Not much better from the standpoint of literature alone is the humanities survey in which literature is combined with history, philosophy, and the fine arts in order to show how the human imagination over the past centuries has expressed itself in various media and how the media at any one time are interrelated. It has never been conclusively demonstrated that a combination of this sort results in greater pleasure and understanding than separate but articulated treatments do. We very much doubt that the specific objectives we have in mind for the literature course can be successfully attained by a choppy sequence of subject matter and an often rather appalling parade of lecturers and discussion leaders.

The Types Course

The types course, as its name suggests, employs literary types rather than chronology as its chief basis of division. Customarily the main divisions are poetry, drama, and fiction, though there are, of course, other combinations possible. Since reading is largely a matter of habit and adjustment, this course allows the student to gain a feeling of competence with one type before moving on to another. This is an advantage that should not be underestimated. Furthermore, a type course insures adequate representation for the various literary forms and allows, even encourages, the inclusion of contemporary work. Probably most important, it is flexible enough to allow the program to be adjusted to the needs and capacities of the students. There is no compulsion to jump into *Beowulf* immediately so that the class can be up to Virginia Woolf by the end of the year. If the class is a slow one, there is time for the reading and discussion of simple poems before the harder ones are tackled; if the class is a brilliant one the introduction can be cut short. The disadvantages of this course are implicit in its advantages. The business of breaking down literature into its types can quickly get out of hand and become only a fretting over sub-sub-genres – hardly a fruitful activity for freshmen and sophomores. Other dangers are that the types course may lean too heavily on the modern, may fail to emphasize the elements which are common to all types, may give no sense of chronology, may make no attempt to relate the work with the author and his period. Our impression is that in practice the types course runs to extremes: either it builds up into a sensible program intelligently adapted to the needs of the students or it disintegrates into a series of trivial discussions about what the instructor has just been reading.

The Masterpieces Course

The masterpieces course is ordinarily organized chronologically and is hence a kind of truncated survey. In it the students read only a few works but they are, presumably, important works, and they are read in their entirety. Sometimes a course like this is confined to British and American books but more often it is representative of the Western tradition. The values of this procedure are so obvious that they need not be repeated here. Probably the most successful general courses in literature in the country right now are those which emphasize the masterpieces.

We should except from this statement, however, the widely advertised programs in the Great Books (the words always capitalized) which seem to us to be quite different from courses which include great books. And since there is a marked tendency on the part of some schools at the present to turn their general work in literature into Great Books courses, we should like to add a few arguments against these courses to those already presented so forcefully by men like Sidney Hook and Howard Mumford Jones. In fairness to St. John's and Chicago, it should be noted that the Great Books courses in those schools are not designed to be only general courses in literature. They should not be imitated, therefore, as though they were. Indeed, one would be hard put to it to make much of an English literature course out of what St. John's offers. In the list published by Mr. Van Doren in his *Liberal Education*[2] there is one novel (*Tom Jones*), five or six Shakespearian plays depending upon what *Henry IV* means, one satire (*Gulliver's Travels*), and two books of poetry (*Canterbury Tales* and *Paradise Lost*). There is nothing from American literature. If one wants a Western literature course, the offerings are numerous enough, but in some instances so esoteric that it would take easily a semester for anything approaching mastery. Just how a student straight from comic books and the *Reader's Digest* is going to absorb Dante's *Divine Comedy* with the exhilaration that the Great Bookmen predict has never been demonstrated to us. Nor are we reassured by Mr. Van Doren's bland remark that "a classic is always fresh, vernacular, sensible, and responsible. Even the mathematical and scientific classics were written in a tradition, the thing to do is to regain it – by mastering its classics – so that we may cease to be gapers at abstraction which half of us now are." Now it is simply not true that all classics are always fresh and vernacular; even in their own day many of those on the St. John's list were abstruse and esoteric. And that a reader should spend hours poking through their language to get at the tradition so that he can understand the language is a circular process that will take more time than the student in a general course has to give. It is one thing to challenge the beginning student with great works; it is quite another to so overwhelm him with problems of language and form and tradition that he concludes literature is something for experts and as for him, he'll stick to the batting averages and *Esquire*.

---

[2] New York: Henry Holt and Company, 1943.

Since the Great Book is invariably one which has appealed to many readers over a long span of time, there is little likelihood of a contemporary work's being given serious consideration. Indeed among the Great Bookmen a phobia for the modern has developed which, when communicated to immature students, creates the impression that literature is not only esoteric but antiquarian. Students in the general course, we think, need to realize that literature not only was but is, and that their own generation has its appropriate place in a continuing tradition.

Another inherent weakness is that since only a few books can be read in any one school year, it is too easy for the course administrator to select only those books which will elaborate his own special notions. When this happens, the literature course, regardless of the good intentions of the staff, is likely to become one devoted to a special brand of ethics or economics or political science. It takes no very vivid imagination to guess the reading program as it might be worked out by a Thomist, a Marxist, or a Neo-Humanist. The last danger is that great books if taught as Great Books are too likely to become Holy Writ. Undoubtedly the Great Bookmen will deny this explosively, but the most startling result of the two most widely advertised courses in the Great Books is that the reasoning of the students has become almost exclusively deductive and authoritarian in nature. Give these students a few premises from Aristotle or St. Thomas, and they are ready for any modern emergency. Frankly the social implications are frightening. When a college sophomore can dispose of a complex modern issue by a quotation from Plato and think that he has analyzed and proved something, and when the administrators can watch this happen day after day and do nothing but beam their approval, education is headed right back to the dark ages. Basically we agree that the emphasis in the general course in literature should be on the more significant works in our tradition, but we want them to be literary works which are not esoteric and which will not be approached as if they had been written in tablets of gold and left slyly on a mountain top.

Recommendations

Once more we are faced with the problem of putting theory into practice. Can the advantages of the various courses now in operation be retained and the disadvantages be avoided? To a limited degree we think this possible, and to that end we make the following suggestions:

First, that enough time be allowed for the student to adjust himself to a particular type of reading experience before another type is introduced. We would recommend three major units to the course: prose (exclusive of exposition and argument), drama, and poetry. We would further recommend that they be taken up in this order as the movement from the student's point of view is from the more to the less familiar.

Second, that some sense of chronology be encouraged by a chronological arrangement of the works within any one unit. The only exception to this might be that in introducing each of the types the instructor might well use contemporary material for illustrative purposes.

Third, that the major emphasis in the reading program be upon recognized masterpieces in our Western tradition. This implies that there will be no attempt to cram in too many titles, and that most works will be read in their entirety. It also implies that in each type (prose, drama, poetry) at least one work should be included which represents the most recent developments in that tradition. This might be a current best seller; certainly it should not go back further than the nineteen-thirties. It is absurd to recognize the beginning of our tradition with the Hebrews and Greeks and then to neglect completely its other and, for many purposes, its more important terminus in the present. There need be no implication that the modern work is equal in artistic quality to the great works of the past. All that is necessary is to have the modern work bear the same relation to the artistic production of the present that any one of the older works bears to the production of its time.

A Reading List

In the light of these various sets of recommendations, the matter of blocking out a required reading list becomes relatively simple. Indeed the process, as we wanted it to, will be anticlimactic. In the last analysis the books which are included, granted that they reflect some degree of taste, are not so important as what is done with them: *Tom Sawyer* well taught will accomplish more in a general course than *Hamlet* poorly taught. It is doubtful, moreover, that for literary purposes there is any one book that *must* be read, or that there are any two or ten books that *must* be read. We hold no great brief for the titles listed below, therefore, though we are confident that they as well as any other, can make good reading enjoyable and habitual. Only a few works in each group, possibly three or four, need be subjected to detailed class analysis.

PROSE

Brief, familiar material for the purpose of introducing the basic problems in reading prose
Bible: Ruth, Jonah, and Luke
Selected classical and medieval tales
Swift, *Gulliver's Travels*
Thoreau, *Walden*
Dickens, *Great Expectations*
Twain, *Huckleberry Finn*

Dostoevski, *Crime and Punishment*
A recent novel
A collection of American, English, Russian, and French short stories
Two works selected by the student

DRAMA

Familiar material plus Aristotle's *Poetics* for the purpose of introducing the basic problems in reading drama
Sophocles, *Oedipus Rex*
Aristophanes, *The Frogs*
Everyman
Shakespeare, *Twelfth Night, Henry IV, part 1, Macbeth*
Moliere, *Tartuffe*
Ibsen, *Ghosts*
Chekhov, *The Cherry Orchard*
Shaw, *Candida*
O'Neill, *Beyond the Horizon, Lazarus Laughed*
Connelly, *Green Pastures*
A recent play
Two plays selected by the student

POETRY

Familiar, readable verse for the purpose of introducing the basic problems in reading poetry
Bible: The Psalms, Song of Solomon
Homer, *The Iliad*
Song of Roland
Chaucer, *Canterbury Tales* (in part)

Renaissance lyrics: Shakespeare, Herrick, Donne
Milton, *Paradise Lost,* Book IX
Wordsworth and Coleridge, *Lyrical Ballads*
Browning, dramatic monologues
Whitman, *Leaves of Grass*
Twentieth century lyrics: Frost, Robinson, Sandburg, Eliot
A recent volume of poetry
Various poems selected by the student

The Teacher

In all of our concern over the philosophy and structure of the general course in literature, it may be charged by some that we have neglected the most important single factor: the man behind the desk. We are not unmindful that the brilliant teacher can breathe fire into the most poorly conceived course or that the inept teacher can quench the fire inherent in the best conceived one. Enthusiasm for the great works of our time and our tradition is something which is caught from the teacher more than it is taught by him. This we freely admit. But we cannot overlook the fact that as the situation now exists the wise and patient and enthusiastic teacher is the exception rather than the rule. There is too much truth in Professor Hook's assertion that the least satisfactory teaching today is being done in the liberal arts colleges. We are afraid that this is particularly true in the general courses where much of the work is handled by inexperienced assistants on the one hand and departmental wheelhorses on the other. What we have tried to do in this chapter is to suggest an approach and a course that will place no impediments in the way of the brilliant teacher and that may be of substantial aid to the mediocre one. Literature is too important to general education for us to do any less.

c. The Fine Arts

Literature alone does not suffice to represent the fine arts in general education. Music, the graphic and plastic arts, architecture, theatre, cinema, and the dance should also have a place; for they contribute to the emotional maturity of the student, promote good citizenship, and when widely understood provide an enlightened audience for the fine arts. Upon these factors depend the health or weakness of the arts, and in proportion the enrichment or impoverishment of society. And there are few who would not wish to see the fine arts play a more important role in American culture than they have in generations past.

In contrast with other disciplines longer established in the university, the arts are taught with such diversity of method and objectives that one is at pains to find agreement on any single principle or on any corpus of indispensable material. General education courses are frequently so superficial in content and purpose that a new term, "appreciationism," has been invented to describe them. There are constant disputes as to the function, or even the propriety of studio work, and there is much confusion of liberal with specialized or professional objectives. Therefore, we shall propose a set of principles applicable to the teaching of all the fine arts, make certain suggestions about each one individually, explain why a "synthetic" course in all the arts together is unsatisfactory, and indicate the degree of transfer of training which may be expected from one to another. We hold that a substantial general education course in at least one of the fine arts should be required of every candidate for a liberal arts degree.

Study of the Fine Arts Promotes Good Citizenship

The arts are relatively recent arrivals in the university family. Like the sciences a century ago they are self-conscious about their value, aggressive in their demands, and optimistic as to their future. The arguments of their friends seem increasingly persuasive. For example, the educator can scarcely deny their contribution to good citizenship and to general satisfaction in living, in areas to which in the past we have given scant attention.

In 1946 a foreign journalist traveling in this country remarked: "The writers of the whole world are charmed with the books of Hemingway and Faulkner, but when you enter an ordinary movie house on Main Street to see an ordinary picture, your head will turn over the depths and immensity of its platitude." The educator who is sensitive to his surroundings notices that public buildings and monuments are often aesthetic monstrosities, either because of their formal ungainliness or because they are eclectic imitations of the art of former civilizations rather than original creations expressive of our own culture. He rides through the filthy tenements of the underprivileged on his way to work. He passes hideous billboards and commercial signs everywhere he goes. Through the windows of houses he sees rooms filled with vulgar "borax" furniture, and devoid of pictures and of pleasing interior design. Few homes are well landscaped and few cities well planned. Wherever the modern American alters nature, he seems to make things uglier. These are components of our civilization which the educator can scarcely accept with equanimity.

The cleavage is as wide as it has ever been in history between the aesthetic allegiances of painters, sculptors, and critics of distinction and the popular level of appreciation as it appears, for example, in commercial illustration; between the legitimate theatre and the commercial theatre; between the modern dance as an art form and the decadent and undisciplined state of social dancing; between architecture as an art and as a business. Only in music is a bridge gradually being constructed to unite modern concert music and the more developed forms of jazz, a bridge whose foundations go down to the roots of popular understanding. We do not expect, as a rule, that our great artists, architects, and musicians will be widely accepted until after their deaths. Moreover, men who are educated in other respects are as susceptible to confusion in these matters as are those whose formal education stopped before they reached their teens. We cannot escape the conclusion that our system of education is defective in this respect.

The contribution of the fine arts not only to the social aspects of good citizenship, but also to the emotional maturity and spiritual balance of the student is equally specific and distinctive, for this is but another perspective upon the same values.

In all likelihood the therapeutic and avocational functions of the arts are destined to receive increasing emphasis. The nerves of city dwellers are bombarded by the clatter of machines, the blare of raucous "music," "soap operas," and vulgar "commercials" on the radio, and the fierce competition of commerce. Many are in urgent need of some sort of release from hurry and nervous tension, from the distressing pressure of unscrupulous conflict in the pursuit of power and money, or from the mechanization and dehumanization of life. The fine arts have merit as a means of release, because at their best they provide a constructive preoccupation, and in any case procure escape. Some such formative avocation the advance of technology will necessitate as the years go by and as the amount of leisure time increases. At present few people know what to do with the time they now have free. A visiting French journalist noticed this defect in our lives when he wrote in the Paris *Libération*:

> "American society is tough, commanded by the tough law of profit, by the even tougher law of the struggle for existence, reducing man either to a machine or a nervous being straining simultaneously for the conquest of comfort and for self-defense. . . . After the fatigue of the day, the American has no taste for the leisure of his evenings or his holidays. Either he has his bed, or radio, or a movie, or whiskey. . . . Above all, no thinking. One escapes from reflection, meditation, solitude. Yet, what is civilization if not the proper use of leisure?"

This is a situation which the fine arts are eminently designed to correct.

The Aesthetic Component of Wisdom is Greatly Neglected in Education

The aesthetic factor shares with the religious the privilege and responsibility of making this contribution to the student's education. Together they may be said to form an aesthetic-religious continuum, for the components of the spiritual are not easily separable. Even the theoretical factor in its most purely intellectual form is not sharply distinguishable, although in so far as it is the instrument of the technological, it is, indeed, in an alien realm.

Most universities today devote relatively little attention to the aesthetic and religious aspects of human experience. A cultivation of the theoretical, in the special sense of a scientific search for truth, is often declared the principal function of the university. In practice this necessitates the most rigid isolation of the theoretical from the corrupting influence of the aesthetic-religious component. Rewarding as have been the fruits of this purity in scientific methodology, not even the participants themselves escape the thought that human experience may contain far more than their sharp instruments are adapted to reveal. Sometimes they raise questions which they cannot answer. Is wisdom an outmoded concept? Is it nothing more than useful knowledge? Is there no truth which science cannot reveal?

Were we successful in educating all students in the rigorous application of the scientific method in a devoted pursuit of truth, we should have less reason to complain. In fact, however, many students never learn to distinguish the scientific from the technological, and an increasing number of college courses, dedicated with varying degrees of frankness to the technological, support this growing confusion. Such a state of affairs is not surprising, for it is to be expected that the college will reflect the attitudes of society. The master "psychosis" of contemporary America, the major concern of our conscious drives and our unconscious preoccupations, is technology. Our predominantly practial frame of reference demands this emphasis as a means of securing the most thorough and uncompromising utilitarianism. To us technology is but the natural extension and fruition of common sense, differing from it only in scope, complexity, and precision. The aesthetic is not a factor in what people call common sense. It is the offspring of a very uncommon sense in the minds of most Americans, although it was a salient aspect of common sense to most peoples of history.

It is comparatively recently in man's history that truth and eloquence became mortal enemies. Our immoderate specialization in the scientific orientation necessarily has the defects of its virtues. Civilizations are remembered for their arts as well as for their science, and few sublime and enduring artists can be bred in an environment of aesthetic apathy and ignorance. Our best artists now escape from society and take refuge in self-expression, surrealism, and other arts of rejection and romantic protest. We shall have no great art of acceptance and of integrative social expression until we deserve it.

A Society in which the Scientific-technological Component is Equally Neglected Would Appear Fantastic

Imagine, however, a situation in which the prestige of the arts and sciences is the reverse of that which prevails in contemporary society.

The picture is amusing in its unorthodox proprieties:

> Everywhere exciting works of art and architecture are springing up and, except for aesthetic discoveries on the most experimental frontier, everyone understands them. Orchestras, opera companies, theatres, and art galleries are lavishly supported in every city. The cinema is a great art form and writers of Shakespearean calibre are writing the scenarios. Movies are made with the hope that they will live in history and are intended to be seen many times by every connoisseur. They are not censored, because people are emotionally mature. The *Saturday Evening Post* and *Cosmopolitan* publish only stories of literary distinction and the circulation is tremendous. Everyone lives in gracious, if often modest, surroundings expressive of his personality, and behaves with comparable style and formal distinction. No one is in a hurry.
>
> Material comfort is relatively unimportant, new conveniences are seldom invented and tardily adopted, important medical discoveries are infrequent, and a preoccupation with the concept of progress is considered neurotic, or at best quaint, since few people are sufficiently annoyed with things as they are to seek flight into a utopian future. The atom bomb is used neither for good or evil; on the contrary it is neglected because of scientific apathy. People get along with each other not so much by using charts, graphs, and statistics of economic and sociological phenomena, but because the majority consider

harmony in human relationships a more aesthetic way of life. This accidentally seems to be moral as well as aesthetic, although such behavior is not defended on that ground; and some people maintain that strife is aesthetically more gratifying than peace and tranquility.

There are nearly a thousand colleges of fine arts in the United States and about a dozen good schools of science or science institutes. Many of the colleges have departments devoted to sciences, but in only a few is the student required to study one of them. In some cases he may play with one or more sciences as an extracurricular hobby, because it is "cultural" to do so and keeps him occupied and out of mischief in his leisure time. Sometimes he gets academic credit for certain work in sciences, provided they are studied as arts and not by more appropriate scientific methods. No productive, professional scientists are to be employed, because they would make inroads in the dominant position enjoyed by the aesthetic way of life, and they are regarded as eccentric since they do not behave as common sense would dictate. Furthermore, it is traditional, and hence appropriate for the colleges to keep scientists at a distance. Their work at its best is admirable, but rather unintelligible and esoteric to the masses. It is considered difficult to be a good scientist; not too many people should be encouraged to try it; one must be born with a special talent. If one must try it, let him get a four-year college education in the fine arts first, and then go to a school of science where he can specialize without disrupting the *status quo* in the college.

The special schools of science give intensive training with emphasis upon correct techniques of experiment. One specializes in a single science, knows almost nothing of the others, and gets no general education whatever. It is claimed that the rigorous demands of his technical education in one science leave no time for other matters. When he graduates he finds few people who understand his work or share his enthusiasms, and no one wants to pay very much for his services. *Life* magazine sometimes runs a few pages about one of his colleagues, either because he has done something the public can easily understand or because he seems incredibly odd and hence newsworthy. Some of his colleagues are being hired as "scientists-in-residence" by colleges of fine arts, not to teach credit courses, but to be exhibited as a curiosity.

It all sounds most incongruous, yet it is a fair picture of an art-centered society and its educational program exchanged for our present science-centered Weltanschauung, and it is reasonable to regard the present situation as equally paradoxical.

Our sense of loss because of our inordinate specialization in science and technology is becoming increasingly apparent to educators. The aesthetic component in education may become, therefore, one of the best antidotes to corrode our penchant for the "practical" and provide us with a better spiritual balance and a more mature sense of values. And since it is also the natural supplement in human experience to the world of sensory and theoretical data revealed by science, we should do well in education to weigh the balance more heavily in favor of literature and the fine arts, philosophy, ethics, and religion.

Aesthetic Understanding Necessitates Education of the Whole Personality

Our concern in this chapter, however, is not how general education may construct an orientation around the idea of "the good life," but rather how the aesthetic way of life may be made to capture the imagination of the average undergraduate – not necessarily that he may be converted from a practical or scientific texture of motivations, but that he may be more liberally educated, that he may share in values derived from aesthetic interests and another way of living, and that as a result our society may be the richer.

This, however, is not easily accomplished, for the problem involves more than the cultivation of aesthetic sensitivity in the narrower sense. The term "aesthetic" must be generously defined, because the eloquence of the fine arts is persuasive with respect to philosophy of life, not merely decorative like a luxurious adornment of life, a beautifying cosmetic applied to the surface of something otherwise complete. We cannot profitably divorce the fine arts from related spiritual concerns; and hence art appreciation is not a technique which can be acquired impersonally. When the starting point is at the level of the soap opera, the class B movie, and the average magazine illustration or civil war monument, the cultivation of a better taste involves not so much an analysis of aesthetic forms as a complete transformation of personality. Education in the fine arts must address itself to the whole man; for works of art are valued ultimately neither for the dexterity which produced them, not for their beauty of pure form, but for their significance in the general hierarchy of human values.

On the other hand, the significance of objects of fine art in a scale of values cannot be proved by intellectual argument alone. Personalities are not thus remolded. The proof of the value is inextricably entwined with personal experience of the art in question. Without this the student will not learn its compelling and transforming power, its capacity to build character, and to forge new and illuminating perspectives upon human values in the larger sense. The function of fact and theory is to guide experience.

Current Defects in Fine Arts Education

The substance of our argument thus far is that the fine arts promote in the student qualities of good citizenship and a more balanced spiritual economy, that their qualifications to perform these functions are in some respects unique and indispensable, and that the present circumstances of our society recommend a greater emphasis on the arts in education to repair the ills our past neglect in large degree occasioned. If these are accepted as the objectives of the fine arts in general education, we are in a position to avoid some of the errors of present practices.

Confusion of General with Specialized Education

The most common errors are the several forms in which specialized aims appropriate to advanced courses intrude themselves in general studies. These include the education of historians and critics of the various fine arts, professional artists in the several media, and secondary school teachers. Since most departments, schools, and colleges of the fine arts are engaged in one or more of these professional activities, the elementary course offered for the general student body tends to reflect this allegiance. Many professors, absorbed in the rarer atmosphere of their specialty, find it difficult to distinguish in principle a general education course from an introductory course in their profession. Far more are able to accept the distinction in principle, but not to carry it out in practice, for it drastically violates too many of their unrecognized professional prejudices. What they consider important material must be omitted in order that selected experiences may be made more graphic to the individual student and conducive to his aesthetic "conversion," and so that a genuine integration of the arts and related studies may be insured.

In the minds of historians of the fine arts this "important" material normally includes numerous facts and bits of information which would be legitimate in the old-fashioned survey course. To neglect them means to omit the "fundamentals" of connoisseurship. In studio courses the "important" material includes all the elementary technical disciplines, to neglect which is to lay no secure foundations for expert performance. In general courses conducted by those engaged in teacher training, large blocks of specialized material useful to the high school teacher must be eliminated, although the instructor will have come by long familiarity to look upon it as essential to all beginners. Since many departments of music, graphic art, and theatre are engaged principally in teacher training, this problem is no less acute than either of the others. The historian, the artist, and the trainer of high school teachers are, therefore, all predisposed unwittingly if not overtly to prejudices against the aims of general education, and more than that to prejudices against each other. Perhaps the most promising solution of the problem is the development of Ph.D. curricula leading to the profession of general educator. The kind of teacher we are seeking should know the history and philosophy of one of the arts and be a reasonably competent performer in it, and he should be well informed in other arts and in related subjects, and should be of a philosophical turn of mind. Such a program is not unreasonably difficult, although men exceptionally suited to it will be as rare as leading specialists and their services should be as well rewarded.

Extracurricular Activities Not Sufficient

Although other supplementary means may be employed with profit, it is certain that we cannot attain our stated objectives of general education in fine arts except through formal courses. There are still a few colleges, however, not of this opinion, no doubt either through slavery to tradition or because they misunderstand the nature and educative function of the arts. In these cases the fine arts, with the exception of literature, are thought of as peripheral, as optional adornments in education, or even as unworthy of academic credit. Perhaps because they are nonverbal, they are erroneously considered "emotional" as contrasted with "intellectual," and hence fads and frills. The faculty may recognize the desirability of providing students some opportunity for contact with them, but merely for the sake of "Culture" (with a capital C) or to occupy their leisure time. One may belong to a glee club or dramatic association or go to a university art gallery on Sunday afternoons, as approved extracurricular activities. Or he may take advantage of informal opportunities to draw and paint as a hobby, or to watch an "artist-in-residence" do so. All these pleasant pastimes sugar-coating the pill of more serious studies are visualized as generally and on the whole a good thing. If they are kept under control, so as not to absorb too much of the student's time, one must grant that at least they keep the student out of mischief.

Unbalanced Curricula

There are other instances where only historical studies in the fine arts are allowed in the curriculum of the college, studio work being disqualified as "technical" rather than liberal. This, too, results from a fundamental misunderstanding of the nature of the fine arts, surprising when it appears in one who knows their history. The argument appears to be that the university is an "intellectual" institution, and that the creative process in the arts is inherently technical in the sense of a trade or craft, demanding little of either knowledge or wit, and supplementing the methodical only by irresponsible flights of fancy or emotional effervescence. It is a judgment apparently derived from observing the lowest forms of expression in the arts rather than the highest. Obviously Leonardo da Vinci would not agree, nor do the educators who hold this thesis ascribe such limitations to the leading painters, musicians, architects, and sculptors of the past. The principle which concerns us here, however, is that effective general education in the fine arts is not possible where studio work is disallowed.

The contrasting point of view is equally absurd. There are colleges where studies in the arts are dominated by professional practitioners who have no understanding of the history of their art and judge historians by their worst exponents of tedious scholasticism. One may, indeed, find historians who lack both philosophy and aesthetic sensitivity, and whose desiccated imaginations shun the involvement requisite to bring an art to life. They regard works of art or music, of architecture or the theatre as a geologist regards his specimens, except that a certain disinterested preciousness with respect to the objects may be elicited by their "cultural" dimensions. This is the profession of historian as degraded to a trade or craft. The artist who judges the value of history by such representatives of its muse, and who eliminates it, therefore, from the curriculum or reduces it to ineffectiveness, suffers himself and inflicts upon his students a crippling impoverishment. When this occurs general education will also be mishandled.

General Nature of a Required Course in Fine Arts

Our objectives, we have stated, cannot be attained except through a formal course in the fine arts which includes both historical and critical studies and studio experiences. We believe that all liberal arts students should be required to complete such a course. What should be the nature of its content?

Synoptic Courses Not Recommended

Synoptic courses embracing all the arts have been tried, but in our opinion they are not the best option. Eclectic courses conducted by a succession of different specialists are clearly unsuited to our purposes as well as generally unsuccessful in any area. Nor is any single man competent to teach such a course at the college level, where the teacher must be a master of his subject. Music, painting, sculpture, architecture, theatre, cinema, and the dance are too much for any man (barring genius) to master in a lifetime. Furthermore few would be inclined to try it. We do not now and will not in the future expect the man who can paint to be able to dance, or the man who can design a building to be able to act or write a symphony. The fine arts have little in common beside the aesthetic component and a related history. Although the educative value of each is similar, the specialist in one does not categorically need to study any other, as, for example, the chemist needs mathematics and physics and the psychologist biology, or as the political scientist needs economics and sociology, and as the student of one foreign language must know others.

This does not mean that the fine artist may be content with the history and techniques of his specialty. Integration with other studies is necessary to a high degree of success in any art, but the particular subjects involved in the relationship will differ with each artist. For one painter, philosophy and psychology will be the subjects most significantly related to his own; for another, history and literature, or music and astronomy, or sociology and the theatre. Music and painting or sculpture and theatre do not categorically have more in common than do music and the science of acoustics or sculpture and philosophy, but for a given individual they may have. Therefore, synthetic courses in all the fine arts, whether taught by one man or by a group, will always have the flavor of a *tour de force* contrived by artifice.

Furthermore, such a course includes too much. The instructor might give unity and coherence to such a wealth of material by making it a course in aesthetics with suitable illustrations from the arts, with bits of information about their history, and a generous indulgence in interesting generalizations. This is not what we require, however, for the student will not have time for significant experiences in any one of the arts. He will feel at home in none, but will learn to talk glibly about any. He may know an array of principles systematically, but will not understand them intuitively or apply them unconsciously. Acquiring aesthetic understanding is like falling in love. It reshuffles your habitual perspectives, creates new centers of concern, changes your judgments of relative value. Our attention must be directed to bringing about these experiences in the student. This cannot be done when we are dealing with more than one art at a time; and a genuine understanding of one is preferable to a wide familiarity with all.

Ordinarily the student has a definite preference for one or two of the fine arts and may dislike the others. To give him a choice will capitalize on motivation, which is quite important in the study of fine arts, as it is in affairs of love, to continue the former analogy. No less than one semester should be devoted to the study of any one art, so that half-year courses may be offered in music, graphic and plastic arts, architecture, theatre, cinema, and the dance, and the student may be asked to choose any two of them; or year-courses may be offered of which the student will choose one. In either case the student's contact with fine arts should extend over a period of a year, and the course should be as intensive as a basic course in science normally would be.

Transfer of Training

If certain values are sacrificed in giving up the effort to survey all the arts, nevertheless any one of them alone is capable of developing aesthetic sensitivity, and this is of principal importance. This sensitivity, once acquired, transfers in some degree not only to daily life, but also to the other arts, although the nature and degree of transfer varies with the arts in question, as well as with the methods of teaching. The measure of transfer from graphic arts, cinema, and theatre to the other fine arts may be considerable, while from music, architecture, dance, and literature it may well be small.

This is one reason why literature alone does not suffice to represent fine arts in general education. Judging by our experience few students of literature who have not studied painting, for example, find it intelligible. They see it as a depiction of substitute objects, interesting because skillful and accurate in rendering, or because of associations with the subject matter. Similarly they often prefer program music, period architecture, and pantomimic dancing. They regard the cinema and theatre as literary plots developed by means of illustrative devices. In each case they miss the formal structure of the art in terms of the medium, and respond only to such of its aspects as may in some measure be verbalized, or connected with history or with some form of illustrational association.

It is not surprising that there is little carry-over from an understanding of literature to an appreciation of nonverbal arts. For one thing the college student is too familiar with the medium. He regularly uses language to communicate practical information, scientific description, and moral precept and finds it difficult to see the difference between this use of language and literature as an art. For the masses of students it takes more than one or two courses to make the distinction clear. Another difficulty is that the medium is inherently too representational in nature. The extra-aesthetic associations related to such matters as literal description and factual statement, plot development and moral judgments of human behavior are commonly so intrusive that they obscure formal values.

The theatre and cinema overlap or draw upon the areas of literature, music, painting, architecture, cinema, and the dance. Hence they are relatively central among the arts and endowed with maximal powers of transfer of training.

The same is true of the graphic and plastic arts, for they stand midway between the predominantly representational art of literature and the purely formal arts of music and dance, yet they are so elastic they may lean far in either direction without strain upon the medium. The problem raised by the relation between form and content, between inherent design values and extraformal associations, are difficult for students to comprehend, and they are central to the development of aesthetic sensitivity. In the graphic and plastic arts the fusion of these elements is very complicated. In such elastic media, there is a continuous series of possible blends, from pure illustration as visual information at one end to pure design as formal expression at the other. To understand drawing, painting, prints, sculpture, and design, one must both respond to pure form for its intrinsic appeal and comprehend its relation to representational and functional values. If this can be done in these media, the student will not have difficulty on this score with any other arts. By comparison, music and dance will be simple and immediately accessible, for they are nearly pure design. Architecture is also essentially pure design, complicated only by function. Literature will be better understood after studying painting, since its formal tensions will be seen in more bold relief, and the integration of style and idea in an expressive unity will be appreciated.

The rapidity with which the student may experience as a whole a drawing, a painting, or a piece of sculpture is also a factor in developing transferable responses. In contrast, performances of one work of art in the theatre, cinema, music, and the dance, and the reading of a story, novel, or even many poems consume much time. Each illustrated lecture on graphic and plastic arts may be filled with many terminal aesthetic responses, a number of which may be discussed, analyzed, interpreted, and evaluated. Moreover, the objects come from every period of history, from prehistoric times to the present, and from every nation. No other art covers the whole sweep of man's history. This, too, increases the number of concepts transferable to other arts and related liberal studies.

Ten Principles of Pedagogy in Fine Arts

We have argued that the fine arts should be taught in separate courses for purposes of general education; because any one of them will develop aesthetic sensitivity in the student, which should transfer to daily life and in varying degrees to other arts; because their separation enables the educator to provide significant experiences and to exploit the motivations of the student, who chooses among them according to his preferences; and for the reason that each art will then be taught with more authority. On the other hand, while we do not favor a synoptic course, certain common pedagogical principles seem applicable to all the arts in general education. The key to successful teaching will lie in the application of these principles in their entirety, and in particular in the dynamic integration of historical understanding, aesthetic theory, and studio experiences.

First, the instructor should assume that apart from one intensive course, no further studies in the subject will be undertaken by the majority of the students during their college career. Hence, technical and factual information useful to the future specialist, and the acquisition of skills should be slighted in favor of the development of understanding. If prospective major students are permitted to enroll, the same emphasis should nevertheless prevail, since the first purpose of the course is to develop a general understanding of the field as a whole, to serve a cross-section of the student body, to create intelligent audiences for the artist and better American citizens.

Second, in order to emphasize understanding, the course should remain close to the philosophy of the subject, to its central principles. Lectures or readings, or both, on aesthetic factors applicable to the art being studied should be a prominent and pervasive feature. They should be accompanied by a profuse use of illustration. Armchair aesthetics alone will prove inadequate. The student should comprehend that the principles arise out of the comparative study of the material and are not absolutes which the arts must respect. He should come to understand the nature and resources of various media through comparative analysis and examples.

Third, the most important periods and exponents of the art in question should be studied historically, critically, and analytically with respect to form and style. Through lectures, reading, and examples the student should become acquainted with the major masterpieces so far as time permits. This acquaintance should involve more than a knowledge of the principal facts and the capacity for superficial recognition, even though as a result the masterpieces selected for study will be few in number. As many as possible should be experienced in the original and others in the best reproductions. Emphasis should be placed upon interpretation, principles of evaluation, philosophical, sociological, psychological, and historical relationships, and current issues in criticism, avoiding historical or technical facts which would seem to the student, at his level, to exist for their own sake without interpretive implications.

Fourth, some time should be allowed each week for small discussion groups. By means of the Socratic method the student can best learn self-confidence in judgment and acquire an intimate understanding of the material and an appropriate active vocabulary to express his experiences with the fine arts. Without this, the instructor cannot be certain that the student comprehends what is being taught. A successful general education course is not an old-fashioned survey course or Cook's tour. The student should not be compelled to swallow more than he can digest.

Fifth, frequent demonstrations or performances in the arts should be an integral part of the course. Musical and dance recitals, theatrical performances, cinemas, and demonstrations of painting, lithography, sculpture, musical and theatrical techniques, and the like, should be given from time to time, and students should be prepared through previous lectures or discussions to understand them. They should know what to look for in terms of technical processes, virtuosity, analysis of structure, aesthetic value, and cultural significance.

Sixth, all students should have some studio experience with the art they study. It may be introduced as laboratory work to illustrate a principle or style or the elements of a technique. Those who are qualified by previous experience, however, and all those who are motivated to make the attempt, should be given the opportunity and should be encouraged to participate in the production of original work. The effort to do or make something which has aesthetic merit, no matter how crude the result, is of great educational value. In this connection it should be made clear that studio work alone, unaccompanied by historical and critical studies, will not guarantee the development of understanding and appreciation, no matter how long it may be continued. Many professional painters, musicians, and actors are aesthetically insensitive even though financially successful, strange as this may seem to the layman. Often they are ignorant of all but one specialized technique, which they mastered well by following someone's example.

Seventh, no one should complete the course without developing an understanding of and an excitement about contemporary forms of expression. Lacking this, the student's education in the fine arts may be "cultured," but it will also be relatively passive and impotent, just as science education would be if enthusiasm stopped at the year 1900 and the rest were treated with casual and polite condescension.

Eighth, in so far as time permits, the student should be taught to apply common aesthetic principles to other arts beside the one he is studying, and to daily life as well. The services of professors in related arts may be engaged on a few occasions to help achieve this objective. The more intelligent students will learn this without much direct assistance, of course, and without consciously employing memorized routines for applying principles. But the process of transfer should not be left entirely to chance. We have already seen that between the more distantly related arts, and for the average rather than the bright student, it will not be automatic.

Ninth, at the end of the course students should have a lasting interest in the subject and know how to satisfy their continuing curiosity, so that education will continue in later years through their own efforts.

And tenth, students should learn in the course whether they are adapted to enter the field professionally.

Brief Comments on the Several Arts Individually

While it is not possible in these pages to discuss in detail specific problems peculiar to each of the fine arts, or to outline proposed course content in six different subjects, it may be useful to point out certain differences which affect methods of teaching in each case. In so doing it will be necessary to call attention to defects in current practice which characterize specialized as well as general education, since the latter is influenced by the former.

Graphic and Plastic Arts

There are several prevalent errors in the teaching of the history of painting and sculpture. The principal one is that aesthetic value remains unconsidered, or is confused with archaeological, sociological, and psychological interest. Connoisseurship is attempted without criticism. The instructor shuns problems of evaluation for fear they will compromise the "scientific objectivity" of his scholarship. The student is neither encouraged nor given time and opportunity to experience either the works of art themselves or men's conceptions of them. Hence, he comes to the unfortunate conclusion that art history is not a creative study, but rather a collection of facts which interest academic people and must be learned by those who want a college degree. A second defect in historical and theoretical studies is the almost total absence in many institutions of courses in contemporary art, or even any deep concern about the art of our day. To remedy this circumstance would do more than any other single thing to give life to a department in the minds of the student body. This, of course, would be true of the other arts as well. In the third place, frequently not enough illustrations are used in lectures; or the illustrations may not be of good quality? One should not talk about what he cannot show.

With respect to studio work in the graphic and plastic arts, the prominent defects are (1) that the media are often misunderstood, being confused with "literary" illustration, (2) that the approach is often too exclusively technical, confusing knowledgeable practice with aesthetic significance, or (3) that an extreme expressionism, which confuses self-expression with originality, may make "modern" art an excuse for irresponsibility. Where the third of these conditions prevails, almost anyone who engages in applying paint to canvas is automatically being "creative." Indeed there are some who appear to believe that all forms of studio work are "creative" and all forms of historical and theoretical studies are "noncreative"; just as there are some historians who seem to hold that all studio work is "merely technical," and all lecture courses "intellectual." These are all strange opinions to unprejudiced educators who have first-hand knowledge of both aspects of the study of art.

Architecture

A general education course in the history and criticism of architecture, with some studio experience in simple problems of designing, would normally be very popular. The instructor would need to stress the aesthetic factors of form in relation to medium, function, and cultural expression. In teaching history he should avoid inculcating in the student the worship of period styles and dislike of modern functional design, which still cast an academic pallor upon the lecture halls and draughting rooms of some of our architectural schools. Some time should be given to interior and furniture design and modern resources and ideas for home construction. The prime function of the course should be to counteract the horrible examples of utilitarian and eclectic architecture, whether public, commercial, or domestic, which confront one everywhere and make stupidity in the practice of the art familiar; and to exercise a similar benevolent influence in the interests of city planning and landscape architecture. Every college should offer such a course, but where circumstances temporarily prevent its establishment some of its functions should be performed by the course in graphic and plastic arts.

Theatre

As in the other fine arts, so in the theatre successful education, whether in a general education course or in the curriculum as a whole, lies in a dynamic fusion of historical, critical, aesthetic, and related material with studio experiences. In addition to auditing performances of historical and modern plays, the general education student should have opportunity for discussion, should witness demonstrations of technical aspects of theatre production, and should participate himself in some of them, whether it be writing, acting, lighting, directing, stage designing, or costuming and make-up.

At present college teaching of theatre art is commonly defective in several ways. It is often confused with literary drama, so that reading or (occasionally) writing plays is undertaken without a complete theatre experience. In many instances the art is thought to consist primarily of acting, which is indulged in as a more-or-less extracurricular hobby, with a minimum of serious instruction and no adequate theatre facilities. Third, attention is often given only to historical plays, as illustrations of cultural history, or only to popular and inferior modern plays with an eye to cheap amusement and a box-office success, rather than to a selection of the best historical and modern work and some effort to do significant experimental plays. Finally, teaching often fails to provide a true concept of the theatre medium as a complex art composed of visual, auditory, verbal, and kinesthetic materials, all of which must be fused into a single unified expression. In proportion as the art of the theatre remains true to its medium and endeavors to exploit it, the performances will tend to be creative and experimental in nature.

At the moment, the theatre medium is not used as functionally as it should be and has been in the past. Dramatic scripts (and movie scenarios as well) are too "literary," too representational or "realistic," whereas the medium is inherently much more presentational, formal, or stylized. Few people understand the medium when it is handled with style and eloquence. The majority want a clearly verbalized plot placed in a naturalistic setting, and many playwrights and producers are commercial enough to respect public taste. Fortunately the trend is toward a theatre art which is truer to the medium, and even the cinema gradually improves in the rhetorical use of its resources. In a university one of the prime functions of general education in these arts should be to promote this trend by educating a more enlightened audience. The plays and films produced should be lucid examples of a correct use of the media, whatever additional merits they may have.

Cinema

A department of cinema in the liberal arts college is desirable. By a curious negligence we altogether ignore in education the greatest art form of the twentieth century, or at best make it a dangling appendage of the departments of art or theatre. In another generation people will surely laugh at our myopia, just as they will laugh at most of our current movies. Some day students will make complete films of the most experimental nature on college campuses, exploiting the unique possibilities of the medium. The elaborate equipment of the mammoth Hollywood industry is unnecessary, nor does one need to spend fortunes on single productions. But one does need some expensive equipment, a good film library, and a staff of competent historians, artists, and technicians to teach the history and criticism of the cinema, photography, the strategic art of cutting, movie acting techniques, lighting, set design, costuming, and make-up. In addition to studying the history and criticism of the cinema, the general education student will get involved in as much of this as possible, without getting lost in skills for their own sake. Special teaching methods to guide him through the maze of exciting possibilities will some day be devised. Now, however, it is too early to make specific suggestions.

When a department of cinema cannot, for the present, be established, the cinema art should not be entirely neglected. In general education courses offered by the departments of art and theatre, some effort should be directed to educating students in the fundamentals of appreciation, and series of good movies should be presented.

Music

The field of music represents aesthetic sensitivity in relatively pure form, uncomplicated by subject appeal, functional purpose, dense historical, sociological, and philosophical relationships, or close correlation with other fine arts. For that reason it elicits less transfer of training than some other arts, although it may be comparable to literature in power to transfer. Music, obviously, develops aesthetic sensitivity effectively, however, and is in itself such a rewarding study, promising of a lifetime of enjoyment, that the degree of transfer is not of paramount importance.

Since the known history of music is short and its course relatively isolated from social history or the history of philosophy and of ideas, it has somewhat less bearing on one's total comprehension of music than have the history of art, architecture, literature, and the theatre on total comprehension in their respective fields. Hence musicology tends to be disproportionately factual, biographical, and technically analytical. Studies in the aesthetics of music, too, are probably less educationally remunerative than are analogous studies in literature, painting, sculpture, theatre, and cinema. Nevertheless, historical, critical, and aesthetic approaches to general education in music, with lavish use of both original and recorded music for illustration, cannot be slighted; and all ten of the above pedagogical principles are applicable to music as well as to the other arts.

Participation in performance is perhaps relatively more important in music education than in the other fine arts. If none is required, the student may erroneously equate musical understanding with a passive and relaxing "appreciationism," or with knowledge of historical incident. Studio experiences in music are easily managed, however. At present far more students have tried some instrument or have sung in a choir before coming to college than have tried painting, carving, designing, acting, or aesthetic dancing. Probably a large percentage of those who have not sung or played an instrument would be willing to try it if encouraged. The same students might collapse of fright if told to draw or paint, and would feel equally foolish on a stage or trying to be graceful in a modern dance, whether or not of their own invention.

Complete participation in music, however, requires an effort to compose, and to play or direct the playing of the composition, and this would be utopian at the level of general education. Hence there is some danger of leaving the student in confusion as to the gulf which separates instrumental virtuosity from creative composition, unless the instructor makes a special effort to prevent it. In practice this confusion often occurs, with the result that specialized technical accomplishments are mistaken for musical understanding.

Dance

The modern dance, *sans* plot and pantomime and antiquated ballet forms, deserves a respectable place in education, and a few colleges have already created excellent departments to encourage it. The material is purely formal and perhaps less dense and rich than other arts can offer, but if the student writes the choreography and performs with skill and spirited interpretation, it follows that aesthetic development will take place. The dance is probably the essence of all the arts, in so far as they have one quality in common, for all seem merely translations into divers media of expressive kinesthetic sensations. It is also perhaps the first of all the arts to come upon the scene in prehistoric ages. Hence both its formal purity and its psychological centrality recommend it as an instrument of education in aesthetic value.

Conclusion

In conclusion, we believe that, in the interests of emotional maturity and good citizenship, the fine arts should have a larger place in general education than they are usually accorded, and that, in addition to literature, one nonverbal art should be required of all students. This plan is preferred to a synoptic course in them all. For purposes of general education, each subject should be taught as an art and not as a form of historical or technical science. Emphasis should be placed, therefore, on the philosophy of the subject and upon direct experience of the art, not upon facts or techniques. Special Ph.D. curricula should be developed to train instructors of general education courses in the arts. Studio experience in each art studied is desirable, and this policy should be put in practice wherever the resources of staff and equipment will permit. When original work is attempted, the quality of the performance is not important, but one should insist that it be as good as the student's comprehension makes possible. An integration of historical understanding, aesthetic theory, practice in criticism, and studio activities is the key to the most effective teaching. Special efforts should be made to secure transfer of training to other arts and to the practices of daily life. Art, theatre, and cinema intrinsically offer the largest degree of transfer of training to other arts, while music, architecture, and the dance exhibit aesthetic sensitivity in its least complex and in that sense purest form. The student should become excited about the art of his own time, articulate about the issues currently debated, and curious enough to pursue his interests after graduation.

7. Appraising the Results

A PECULIARITY OF THE AMERICAN SYSTEM OF GRADing, both in secondary and higher institutions, is the weight attached to the length of time spent under instruction, a degree being attainable by gradual accumulation of a specified number of "credits" (certificates of definite periods of time spent successfully under instruction), which thus largely replace the examinations used in other countries for testing the student's capacity at various intervals.[1]

Most of the published work on general education has been concerned with defending the philosophy basic to it. It proposes curricula that will presumably reach the educational objectives implicit in such a set of principles better than educational programs now in existence. This is as it should be, because the theory of education and its practical working out are matters of first importance. They very largely determine what goes on in the classroom and in the minds of students. It is our opinion, however, that there are certain other problems which arise in the operation of a program of general education which are also of sufficient importance to warrant some consideration in a volume of this type. One of these has to do with certain problems of educational measurement. It is recognized that the particular measurement problems we have in mind are not completely unique to a general education program. They are, nonetheless, problems which must be solved if a general education program is to operate with maximum effectiveness.

---

[1] *The Yearbook of the Universities of the Empire,* G. Bell and Sons, Ltd., London, 1938.

Although there are no functions of educational measurement which do not contribute in some way to the operation of a general education program, there are at least two toward which specific attention should be directed. These are (1) the appraising of the status of an individual with reference to the stated objectives of the program and (2) the evaluation of the effectiveness with which the program itself enables those participating in it to attain these objectives.[2]

Appraising the Status of the Individual Student

Obviously there are a number of reasons why the appraisal of an individual's status is of utmost importance. Attention has been drawn in earlier chapters to the extreme differences in environmental background and consequent opportunities for learning, and to the wide variations in capacity for learning among those enrolled in even the more selective colleges. There is no uniformity in the raw material. Some students simply require different processing from others. If the instruction is to be efficient – if certain individuals are not to be left grasping at straws while others loll in complete boredom on the shores – some basis must be established for adapting instruction to individual needs. The student too should be informed of his educational status in order that he may be motivated to overcome his weaknesses and to maintain his advances. These principles are not new. They have long been recognized and have received much tribute. The fact remains, however, that typically no steps have been taken to apply them.

---

[2] No attempt is made in this chapter to discuss the problems of measurement as they apply to vocational counseling or student personnel work. These problems are not considered because they are primarily the concern of specialists and because there does not appear to be any aspect of them particularly unique to general education. It is important that this omission not be interpreted as implying that institutions offering a program of general education have no obligation for making such services available to their students. It is true that general education is not concerned with the problem of training specialists, but this does not relieve it of the responsibility for assisting students to discover those areas of specialization for which they are best suited.

Undoubtedly the major reason for this failure is the apparent increase in cost which must necessarily accompany any attempt to adapt instruction to individual needs. We say apparent because the saving which would accrue to individual students through increased advances in learning is generally ignored. To a certain extent, however, the adaptation of instruction to the individual student need not imply completely individualized instruction, for individuals can, to a degree, be classified into groups according to their needs and given some group instruction. It is, of course, important to recognize that even under the most favorable conditions of homogeneous grouping, there remains among the individuals in a given group a sufficient diversity of talent and interest to demand special attention if optimum results are to be attained. Grouping according to needs is no cure-all for the problem of individual differences. At best, it can serve to make the teacher's work a bit easier. The task of classifying according to need is clearly a problem in educational measurement. It is not a problem which has been ignored in the past, but is rather one which in our opinion demands an improved solution.

The unit of measure which is in common use in the colleges of the United States is the credit hour. It is assumed, for example – at least so far as the records go and so far as subsequent treatment of the student is concerned – that two students, who have completed and received credit on the books for an equal number of hours of instruction in a given subject are at the same stage of educational development in that subject and therefore may be classed together for purposes of further instruction in that subject. Moreover, and aside from the problem of classification for purposes of instruction, it is common to measure the extent of an individual's education in terms of time spent under instruction. Degrees are awarded to all students who successfully serve the required time. Most teachers would not hesitate to question the validity of this procedure. Yet it continues in extensive (in fact, almost exclusive) use in the colleges of this country.

In spite of all this – and we are fully cognizant of the vast differences in educational achievement existing among individuals who have been credited for equal amounts of time spent under instruction – we are not willing to recommend at this time a complete abandonment of the credit-hour as a unit of measurement. Instead, we recommend (*a*) that the over-all requirement for the completion of a general education program be in part expressed in terms of a minimum amount of time spent in resident instruction, but that (*b*) examinations be employed in the placement of individuals within the program. This recommendation rests on several assumptions which should be stated specifically.

First, it is assumed that there are certain benefits to be derived from the simple act of living in a college environment. We have in mind those which are frequently referred to as intangible outcomes though we hesitate to employ this phrase. More specifically we refer to the broadening change in attitudes and increasing tolerance which may result from living and working with others of different races, nationalities, creeds, and social, economic, and geographic backgrounds; to the development of efficient and scholarly methods of inquiry or study, the cultivation of intellectual curiosity and the motivation of a lifelong search for things valuable and useful by means detached and unprejudiced, which development and cultivation may be furthered and strengthened by contact with and observation of scholarly members of the staff; to the growth of aesthetic sensitivity which may result from attending concerts, dramatic productions, exhibits, lectures and the like; to the development of control over the techniques essential to good citizenship which may grow out of participation in campus activities and affairs. These benefits are all among the avowed objectives of general education and are the outgrowth of time spent in a college environment.

Second, it is assumed that virtually no one participating as a student in a program of general education is likely to be so far advanced as to be unable to profit further from contact with the college environment. Even specialists working toward advanced degrees continue to some extent to reap such benefits.

Third, it is assumed that the instructional program can and will be so adapted as to preclude the possibility of requiring any student to devote attention to such skills or bodies of knowledge as may already be at his command.

Finally, it is assumed that the individuals whose talents have enabled them to be most advanced at the time of their matriculation are the very ones who should remain longest in the college environment. This in turn is based on the assumption that it is from among this more talented group that our society will obtain future leadership. Certainly these potential leaders should receive the best possible training. To excuse them from a minimum time requirement simply because they succeeded early in meeting standards established for those of average or less than average ability to learn would be comparable to the most wanton destruction of a national resource.

These assumptions which we believe to be valid are the basis of our recommendation that a certain minimum time spent in resident study remain a partial requirement for the completion of a program of general education. Educational growth, development, progress is implicit in each assumption. The phrase minimal time requirement as used in this chapter must, therefore, be interpreted as implying satisfactory educational progress. Under no other conditions would such a requirement be tenable.

But it should be clearly understood that we are not advocating the placing of complete dependence on the unit of time even with its implied satisfactory progress. There are measurable minimal requirements which must be met before a student can be certified as having successfully completed a program of general education regardless of the amount of time needed by him to do so. In the chapter devoted to language and communication, for example, a program designed to measure certain requirements has already been described in some detail. There it is recommended that the testing occur before classes open so that the students can be placed immediately into relatively homogeneous groups or sections, and, further, that the students demonstrate a command of certain skills before the time under instruction be counted toward fulfilling the time requirement of the course.

Procedures similar in principle to that described in the chapter on language and communications may be developed for each of the several areas of human knowledge which are covered by the courses included in the general education program. A principal difference would be that all work in each course, including that done by those who fail initially to meet the minimal requirements, would be countable toward the time requirement. The preliminary examination should be designed to measure the student's command of the basic aims, principles and issues of the area. It should measure his knowledge of chief sources of information regarding the area. It should measure his ability to solve problems in the area. To an extent which can reasonably be expected of a novice, it should measure his ability to think critically, to reason logically and to reach sound conclusions with respect to real or hypothetical situations which conceivably might confront a worker in the area. Finally, to whatever extent is possible, the student's appreciation of the implications of the area for intelligent citizenship should be measured. Performance on the preliminary examination will provide an immediate basis for the adaptation of the instructional program to individual needs.

The final or certifying examination should be equivalent to the preliminary examination. A student may, in terms of his initial status, make satisfactory progress during the course of a semester's work and yet be unable to perform sufficiently well on the final examination to be certified as having met the minimum ability requirements of the program in the field. On the other hand, a student who satisfied the minimum ability requirements on the preliminary examination may not demonstrate sufficient progress to justify counting the time spent toward the minimum time requirement of the area. A student should only be certified as having satisfied the requirement when (1) he has met the minimal time requirement set, satisfactory educational progress being implied, and (2) when he demonstrates upon examination that he possesses the required minimal accomplishment.

Ideally, the standard established for required minimal command should be an absolute standard rather than a relative one. The primary concern is whether or not a student has achieved specific minimum objectives. The fact that his performance on the examination was superior to that of a certain percentage of his fellow students on the same examination is of much less importance. That some attention must be given, however, to the individual's relative status is inescapable.

How otherwise can absolute standards be derived which are reasonable in the sense that they may be achieved within the limits of a reasonable maximum period of time by the students who should and may be expected to participate in a program of general education. And, of course, the standard established for the satisfactory progress implied by the time requirement is a relative one, for the measurement of progress requires that the student's performance on the final test be related to his initial status.

To this point we have had little to say about the specific nature of the measuring instruments that might be employed. A detailed discussion of existing measuring devices, of the problems of test construction, of the theory of educational measurement, of recent developments in measuring understandings, changes in attitude, interests, and the like would require several volumes and is, obviously, beyond the scope of this chapter. There are a few matters, however, which should be considered specifically.

While satisfactory methods for testing knowledge of the factual content are a part of most teachers' repertoire, few teachers are skilled in the construction of instruments which test for understanding of relatively broad concepts, principles and generalizations, for ability to apply principles – particularly in novel situations – and for ability to evaluate and interpret new facts and conclusions. Most instructors fortunately have probably been much more successful in developing such abilities in their students than they have in constructing valid examinations to measure them. With these abilities important as desired outcomes of a program of general education, it is imperative, if such a program is to be successfully administered, that valid ways and means of measuring them be known to the instructional staff.

The instructional staff must be informed concerning all of the latest advances in the measurement of these abilities. They should be familiar with the various schemes to measure skill in organizing notes, ability to make correct interpretations of the factors involved in various art forms, skill in detecting the assumptions underlying and the implications of conclusions, ability to generalize and make predictions, ability to apply principles in novel situations, and skill in use of scientific method. They should recognize that there is no one best test procedure for measuring all types of educational results any more than there is one best teaching method. They should be able to employ skillfully and under appropriate circumstances essay, oral, performance, and various types of objective testing procedures. They should be alert to the possibilities for "informal" measurement and evaluation which may grow out of contact with the students both in and out of the classroom.[3]

[3] As already suggested, no detailed discussion or illustrative examples of the methods which have been developed to date for the measurement of these skills and abilities can be presented here. Attention should be called, however, to a few sources which may prove helpful. *The Construction and Use of Achievement Examinations* by Hawkes, Lindquist, and Mann published in 1936 by Houghton Mifflin remains outstanding for its helpful and practicable suggestions on test construction. It contains many examples and provides a good introduction to the theory of item selection. *The Measurement of Understanding,* Part I of the 45th Yearbook of the National Society for the Study of Education contains material that should be of great interest to those concerned with measuring the outcomes of a program of general education. Particular reference should be made to the chapters devoted to the social studies, the sciences and the fine arts. These chapters illustrate and discuss the schemes which

The instructional staff must be informed with regard to the basic theory of educational measurement particularly as it applies to the interpretation of test results and to the reliability and validity of test scores. They should recognize the importance of translating and expanding the general objectives of the program into detailed syllabi usable for purposes of designing valid tests as well as developing the actual program of instruction.

The relationship between the length of a test and the reliability of a test should be understood and the need for greatly increased testing time recognized. In this connection the staff should realize that time spent in testing is not time lost from learning. According to the evidence of investigations, the effect of examinations on the student's educational progress is as powerful, minute for minute, as any other known activity in learning.

Institutional Examination Service

We are fully cognizant of the fact that even in the better institutions staff members will not have at their command the skills and understandings we have out-

---

have been developed for measuring the various types of understandings implicit in a command of these areas. The references listed in the volume obviate the need for a more complete listing here. For further examples of actual test materials, it is suggested that the materials produced by the Board of Examinations at the University of Chicago be examined. The materials developed for the *Study of Educational Progress* which is now being conducted by the University of Chicago in an effort to appraise some of the effects of a general education will be particularly helpful. Certain of the tests of the Cooperative Test Service, of the tests developed for the Eight-Year Study of the Progressive Education Association, and the *Iowa Tests of Educational Development* should most certainly be examined.

lined. This serves to emphasize further the importance of providing the instructional staff responsible for a program of general education with special training. It would be naive to expect, however, that special training of this type will provide a completely adequate solution to the problem of measurement in general education. Advances in educational measurement have come so rapidly and have become sufficiently technical that the typically overworked instructional staff can no longer reasonably be expected to assume complete responsibility for preparation of the best examinations possible. We hasten to state that we do not wish to suggest that the instructional staff be relieved of all testing responsibility – that a system of complete external examining be instituted. It is still true that the task of examining can be best accomplished by those who are closest to the problems of translating the general objectives of the program into the work of the classroom, that is, by the instructional staff. We do suggest, however, that the instructional staff will be able to carry on a greatly improved program of measurement if it is able to command competent technical advice and assistance and if it can be relieved of the heavy burden of clerical and statistical work implicit in a comprehensive program of measurement.

Several colleges in this country have experimented on the problem of providing such service, the best known perhaps being the University of Chicago.[4] Actually, however, it is doubtful if there is one best scheme for providing this service. The design must certainly be adapted to fit the peculiarities of the local situation. The size of the Examinations Service staff and the extent of its functions are, for example, quite dependent on the size and wealth of the college. We shall, therefore, attempt no detailed recommendations regarding the implementation of the proposal that an examinations service be instituted. The few specific suggestions which follow should definitely be regarded as the minimum requirements of such a service.

---

[4] A brief description of the Board of Examinations at the University of Chicago and its policy of operation is given by Boucher and Brumbaugh in *The Chicago Plan* (Revised Edition), University of Chicago Press, Chicago, 1940.

The functions of the service should certainly include:

1. The responsibility for the administration of any special testing program adopted by the college. This would include the administration of placement tests given at the time of matriculation as well as the qualifying or final area examinations given periodically. Local arrangements for any testing programs in which the college participates cooperatively with other colleges should be handled by this service. Administration as here used should be understood to include the arrangements for giving and scoring the tests and for reporting the results of the tests involved.

2. The responsibility for the mechanical and clerical burdens involved in any examination which the instructional staff may wish to give at any time during the course of the term's work. This would include the typing and duplication of the questions or items, the scoring – if the test is one that can be scored from a key by clerks – tabulating and statistical analysis of the test results.

3. The responsibility for providing, when desired and needed, assistance and advice on the technical problems involved in the construction, administration,

and interpretation of results of examinations of all types. This would include not only advice on the construction of items designed to measure certain specified objectives, but also the furnishing of item analyses intended to show the effectiveness of the items finally chosen. It would also include assistance in the problem of establishing critical scores and the score limits corresponding to various letter grades or other similar descriptions of the quality of the student's performance.

4. The responsibility for carrying out any studies which the staff may desire for the purpose of evaluating the effectiveness of the program of instruction.

5. The responsibility for maintaining a collection of specimen tests illustrative of the latest and most promising developments in techniques of measurement.

The service should be directed by an individual trained at the doctoral level in the fields of educational measurement, statistics and educational research techniques. His staff should include the technical, stenographic, and clerical assistance necessary to meet the responsibilities cited. His office should be equipped with such typing and duplicating machinery as is needed for first-class test reproduction. Certain items of computing equipment are also essential and the possible use of test-scoring machine should be considered.

It is recommended that the service be given a budget adequate to enable it to carry out its functions. This is preferable to having the service charge costs against the budget of an area or department. This latter procedure might tend, in certain instances, to prevent some staff members from realizing the full benefits that the service is capable of extending to them. The director of the service should be responsible to the dean of the college or, in the case of a university where the service may be extended to several colleges, to the president or to a university board or committee appointed by the president and composed of representatives of the several colleges served.

A certain member or members of the instructional staff of an area may in some situations be specifically delegated or assigned the responsibility for the construction of test materials for the general educational course offered by the area. This individual should, of course, be instructed to work closely with the director of the examinations service or his assistants. There is little doubt that a service of this type can make a most important contribution to the administration of a program of general education. Surely, if examinations are to bear the responsibilities which have been recommended, no effort should be spared to produce the best possible test instruments.

Appraising the Effectiveness of the Program

There remains to be mentioned a topic of utmost importance to the success of a program of general education — for that matter to the success of any program in education. The small amount of space here devoted to this problem is by no means commensurate with its importance. We have reference to a continuing appraisal of the effectiveness of the instructional program. In the final analysis, the success of any educational program should be reflected in its product. If, on the whole, those who have participated in a program of general education are not measurably better citizens than those who have not, then either something is fundamentally wrong with the implementation, or the whole concept of general education is untenable. We do not believe the latter possibility can hold, but we recognize the likelihood that the former may. Hence, it becomes almost impossible to overemphasize the importance of maintaining a running check on the effectiveness of the program.

Such a check demands the best of measurement. It implies not only a constant appraisal of the success with which immediate objectives have been achieved, but also a follow-up of the participants for some years after their completion of the program. Most of the recommendations we have made with regard to the evaluation of the individual can be applied to the evaluation of the program. New or greatly improved techniques of measurement will need to be developed if certain of the more lasting objectives are to be assayed.

But it is not our intention here to try to defend or even propose the details of a complete program of evaluation. We wish only to remind of the importance of a continuing open-minded, unbiased appraisal. When the aims of general education are considered – when the responsibility to society born by such a program is recognized, it is clear that the implementation must be the best possible. This best possible implementation can be achieved only if we are in command of information which mirrors false steps – which suggests ways and means for improvement and advance. Evaluation of the program is consequently an inescapable responsibility. Only thus can we know whether the individual and the society which the educational program is supposed to create are actually coming into being.

[illegible]